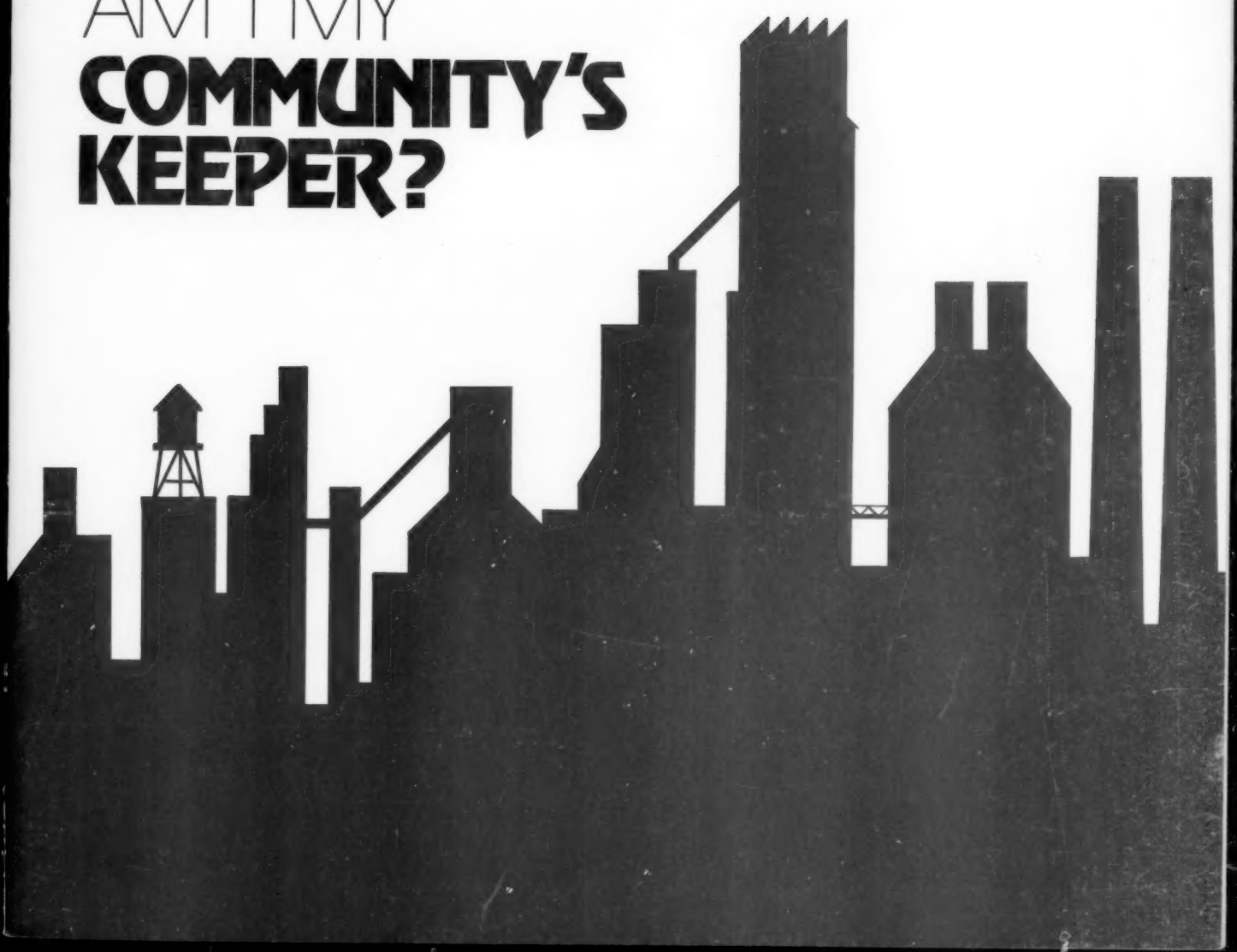
COMMERCE AMERICA

U.S. Department of Commerce / April 25, 1977

AM I MY COMMUNITY'S KEEPER?



Newsmemo

What kind of winds are blowing in the economies of Southeast Asia? From the U.S. Trade Center in Singapore comes this new reading: "It appears that as a result of increasing emphasis on economic and political stability through regional cooperation by member countries of the Association of Southeast Asian Nations there has been a rekindling of interest by many businessmen who had previously considered the area as a good prospective market, but whose enthusiasm had waned over the past two to three years. The countries in the region are receiving more and more attention from business organizations far and wide, and attracting an increasing number of trade missions."

Thanks for breaking up the ice. Last winter's discomforts are now only memories, but the maritime community in Baltimore has not forgotten. Around-the-clock work by five U.S. Coast Guard vessels kept the Chesapeake Bay shipping lanes open in frigid January and February, preventing the loss of valuable business and jobs. So four port groups in Baltimore decided this month to express their appreciation. Now the Baltimore Coast Guard unit has a memorial plaque recognizing "its tenacious devotion to duty by keeping open the ice-clogged shipping lanes to the port of Baltimore during the unprecedented severe winter weather of 1977."

Are we heading toward a fourth era in corporate headquarters siting? Officials in Arkansas, who would like to be a part of such a change, believe it is on the way. It started with centralization by the blue-chip firms to the big cities, mainly New York. Then there was the shift to the suburbs, to places like Westchester and Fairfield counties. This was followed by movement to urban centers in the Southwest, such as Houston, Phoenix and Denver. Now it may be the turn of smaller sunbelt cities: Little Rock, Durham and Charlotte. The attractions are in the area of taxes, commuting costs, transport, construction costs and general business amenities, say the Arkansas development leaders.

Here's what advancing technology can do to traditional patterns of consumption of standard commodities. For years the conventional auto battery was composed of about 87 percent lead and 13 percent antimony. Now comes onto the market the low-gasing "maintenance-free" battery, seen in two types. One has 4-7 percent calcium and 93-96 percent lead, the other 5 percent antimony and 95 percent lead. So last year the lead demands of the storage battery makers shot up 11 percent, and the increase will probably be steeper this year.

Put responsibility for bank soundness squarely with the board of directors. Out of analysis of U.S. banking problems by the Federal Deposit Insurance Corporation comes this conclusion. Several large failures in 1975 brought sharper scrutiny by the FDIC, and cease-and-desist orders rose from 8 in 1975 to 41 in 1976. The FDIC has concluded that an increasing responsibility for bank safety and success lies with bank boards rather than with management. Despite the rise in number of unsafe banking practices, an overall look at the 15,000 institutions in the U.S. system shows them to be sound and healthy.

In air pollution control a popular practice is: watch California. Currently this applies in the paint field. California is proposing to put into effect by Jan. 1, 1979, a stringent new solvent emission standard that would stop use of solvent-type coatings with less than 70 percent total solids by volume. The state's air resources board believes that surface coatings are the source of 64,000 gallons per day of hydrocarbon emissions in California. The industry estimates it to be about a third to one half that much, and figures are now being developed to blunt the impact of new California standards. Producers are concerned about lessened coating quality, higher costs to consumers, and lack of suitable substitutes for products that comprise about 40 percent of their total sales.

". . . and the commercials were the best part of the show!" U.S. housewares firms will be happy to hear such a comment next fall. Sixty of them, showing at the Chicago National Housewares Exposition in July, will have their product presentations put on sound-and-color videotape for September viewing at U.S. Trade Centers and other display sites in 11 foreign cities. The TV "spots" will be backed by nearby samples ,catalogs and full-scale promotion to attract potential buyers and agents. Fred Gaynor (202-377-3846) of Commerce-OIM, organizing this unusual follow-on showcase effort, works from the premise that U.S. consumer goods are now highly competitive worldwide.

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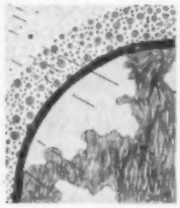

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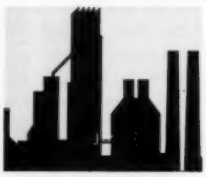

COVER: "How does a corporation that wants to act responsibly figure out what it is supposed to do?," asks Commerce Secretary Kreps in the article beginning on page 4 which considers the role of the corporation in its community.

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Service Earnings, Cyclical Recovery Bolster Strength Of U.S. Dollar Despite Growing Deficit In Trade

This column was prepared by Commerce Chief Economist Dr. Courtenay Slater in collaboration with Leslie W. Small, staff economist.

Dr. Slater

Record U.S. merchandise trade deficits in January and February received considerable publicity and have provoked questions as to whether some direct policy response is required. An examination of the underlying situation shows, however, that much of the trade deficit is offset by surpluses elsewhere in the international accounts and that the U.S. trade deficit is playing a constructive role in a world economy thrown out of balance by gigantic oil price increases.

The U.S. dollar has been rising in value relative to a trade-weighted average of other major currencies almost without interruption over the past two years (Chart 1). This has occurred despite the major swing from surplus to deficit in the U.S. merchandise trade balance. Contributing to the strength of the dollar have been a growing surplus on service transactions (Chart 2) and a recognition abroad that the United States has been among the more successful of the major countries in promoting economic recovery and bringing inflation under control.

Exchange rate movements during the past three years have been heavily influenced by the enormous rise in the world price of crude oil since 1973. One result of this action was to create severe inflationary pressures in all oil-importing countries. Actual rates of price increase varied substantially from country to country, however. Germany and Switzerland have had considerable success in restraining inflation, while the United Kingdom and some other countries have experienced inflation rates much greater than those of the United States.

Chart 3 shows indexes of the prices of four currencies relative to the dollar with the first quarter of 1971 as the base period. From early 1973 through February of this year, the German mark appreciated 25 percent and the Swiss franc 38 percent. The Japanese yen rose slightly and the price of the British pound fell almost 30 percent. Since the end of February, the yen has appreciated 4 percent, and the pound has been relatively stable.

U.S. merchandise trade figures have reflected the course of the business cycle, moving strongly into surplus as imports fell during the 1975 recession and then shifting into deficit as the domestic economy recovered and import demand rose. Rising oil imports, occasioned in part by the severity of this winter's weather, have also contributed to the deficit.

In addition to merchandise, businesses in the United States and abroad sell services such as insurance, brokerage fees, hotel and restaurant fees for tourists, transport services, and other "invisibles." Substantial U.S. earnings on investments abroad also are included in the service component of the international accounts. Although U.S. spending abroad on travel and tourism exceeds foreign spending in the United States, other components of the service accounts are strongly positive. As Chart 2 illustrates, a growing surplus on service transactions has offset the merchandise trade deficit, so that the U.S. balance on goods and services remained positive from mid-1973 through the end of 1976.

Another very large item in the international accounts is the flow of investment funds. The flows of private investment funds into and out of the United States are plotted in Chart 4. Since 1973 there has been a net outflow of private assets; that is, U.S. private investment abroad has exceeded foreign investment in the United States.

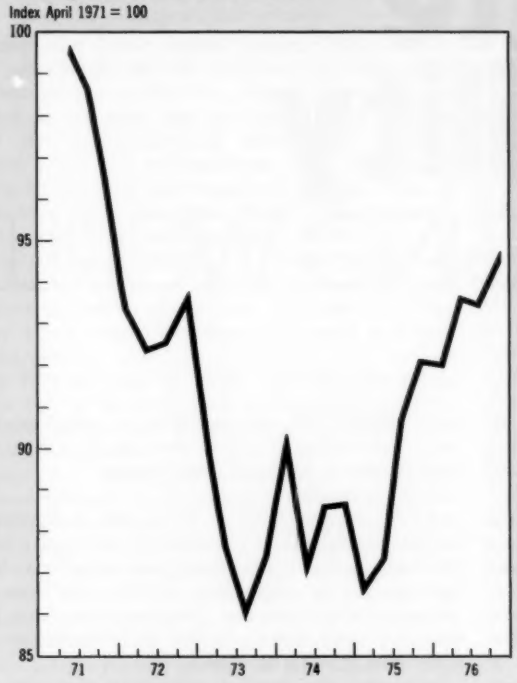
A large proportion of this outflow is due to U.S. banks lending abroad, investing their loanable funds at higher interest rates than have been available in the United States. Some of these bank loans have been made to help other countries finance deficits caused by the increase in oil prices. During 1976, U.S. banks reported an increase of $20.7 billion in claims on foreigners, compared with $13.5 billion in 1975.

A large part of the outflow of private assets from the United States has been offset by inflows of foreign official assets, much of it from OPEC countries. The OPEC nations have earned far more from their sales of crude oil than they could spend for imports. During 1975 and 1976, OPEC nations accumulated about $40 billion each year in surplus revenues and placed them in demand deposits. During 1976, foreign official assets in the United States increased $18.1 billion, of which almost $9.9 billion was used to purchase U.S. Government securities.

As long as oil exporting countries continue to run huge surpluses, other countries will run a combined deficit of equal size. For many developing and developed nations the high cost of oil imports has already produced a heavy burden of external debt. While the developed countries can initially help the developing countries by pursuing trade policies of a stimulative nature, all oil-importing countries share the problem of financing oil-related deficits. This debt as a whole cannot be paid back to oil-exporting countries until they are able to import more than they export. Meantime, the oil-related problems can be helped by financial mechanisms with maturities which more accurately reflect the considerable period of time which will elapse before the surplus of the OPEC countries will be eliminated. More basically, financing problems can be reduced by stronger efforts to achieve energy conservation. Opportunities for conservation are especially great in the United States, where per capita use of energy considerably exceeds that in most other countries of the world.

Purchase Price of U.S. Dollars, Trade – Weighted Average Index of 14 Countries 1

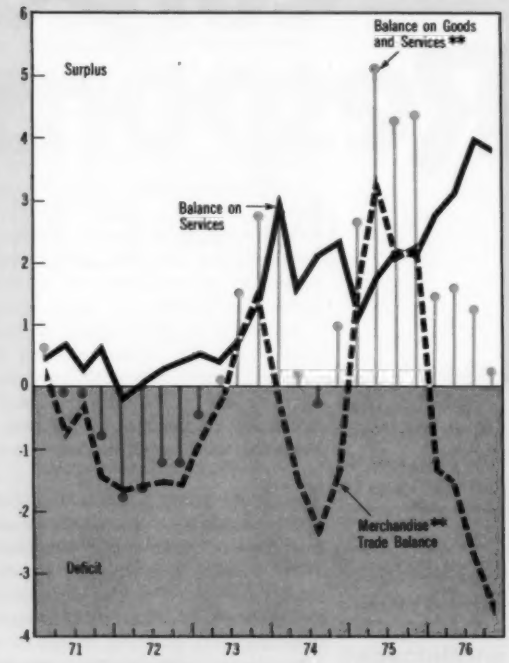
Index April 1971 = 100



Source: Bureau of International Policy and Research, Dept. of Commerce

Components of U.S. Balance on Goods and Services* 2

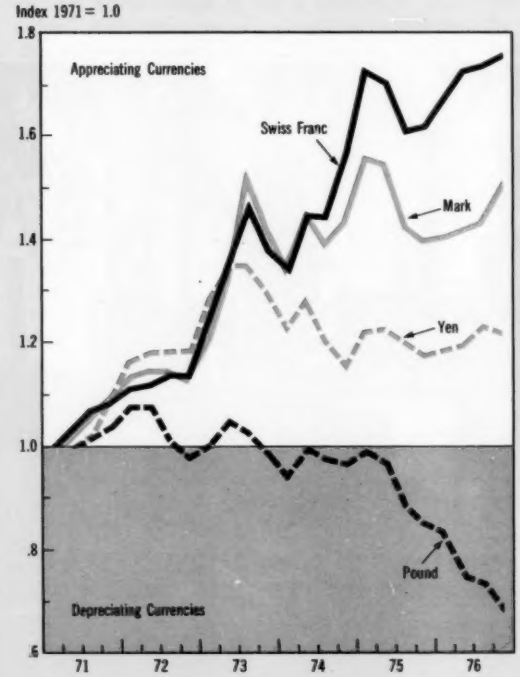
$ Billions



**Balance of Payments Basis

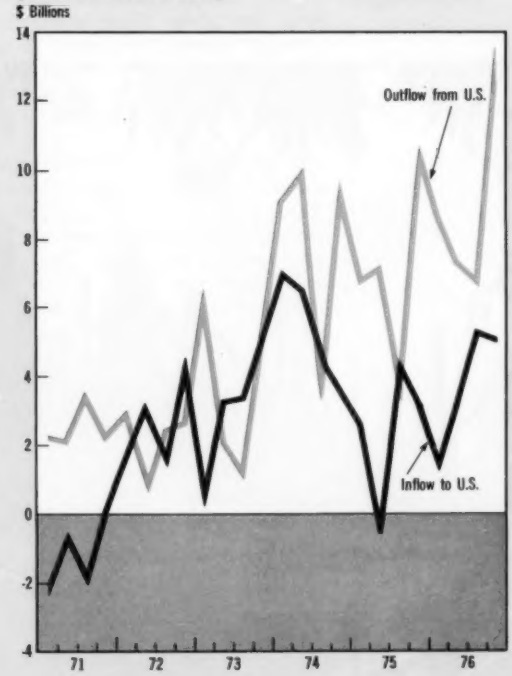
Comparative Exchange Rates Relative to U.S. Dollar 3

Index 1971 = 1.0



U.S. and Foreign Private Investment Flows* (Total Private Assets) 4

$ Billions



*Seasonally Adjusted at Quarterly Rates

Corporate Responsibility IN A CHANGING WORLD

This article is based upon a recent address by Secretary of Commerce Juanita M. Kreps to the National Assn. of Manufacturers in Washington.

In recent years a great deal has been written on the subject of corporate responsibility. Shrinking resource frontiers, disenchantment with pell-mell growth and the emergence of a host of quality-of-life concerns have focused attention on the question of what obligations a corporation has to society.

We may applaud the concern that motivates this question. But there are some problems with the way it is conventionally phrased. To begin with, its phrasing nearly always suggests that this responsibility is moral or ethical.

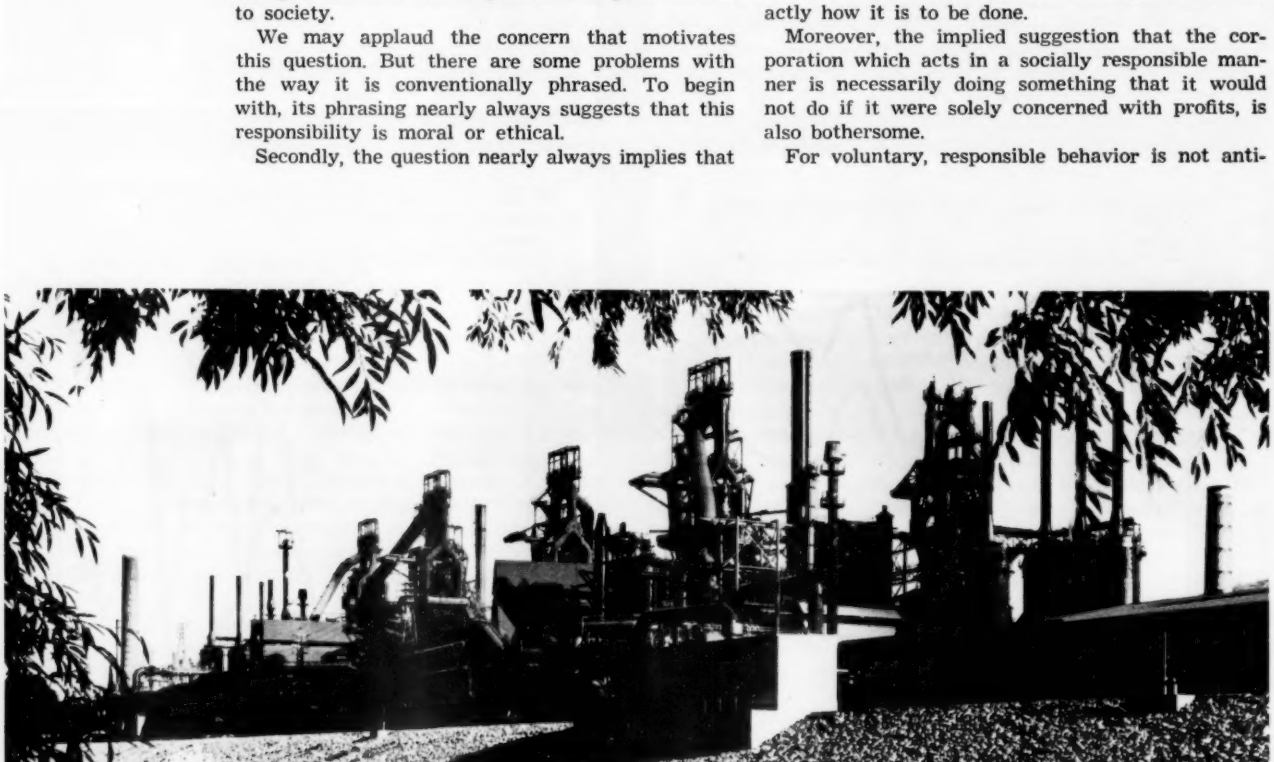
Secondly, the question nearly always implies that by fulfilling this responsibility, a corporation is doing something it would not do if it was concerned only with maximizing profits.

In fact, neither is true.

Social responsibility is no longer a matter of voluntarily deciding to do what is moral or ethical. The only choice corporations have today is a choice between acting responsibly of their own free will or doing so because the Congress tells them they must and sets down—section and subsection—exactly how it is to be done.

Moreover, the implied suggestion that the corporation which acts in a socially responsible manner is necessarily doing something that it would not do if it were solely concerned with profits, is also bothersome.

For voluntary, responsible behavior is not anti-



thetical to maximum profits. On the contrary, because irresponsible behavior leads to regulation, social responsibility and profit maximization more often than not dictate similar actions.

Those who have crossed swords with OSHA, EPA, or ERISA are all too aware of how costly and burdensome regulations can be when they are drafted by someone who has never been inside a plant and cannot possibly tailor rules to their peculiar needs and circumstances. It is easy, when in the clutches of the regulator, to say, "Gee, I could have done the same thing a lot cheaper." But by then, you don't have that choice.

If corporate responsibility is a cost of doing business like any other cost of doing business, the next question is obvious—How does a corporation that wants to act responsibly figure out what it is supposed to do?

It's not an easy question, because the social desirability of behavior must be measured in terms of public values, and public values are both relative and changeable.

Today, it is considered unacceptable to besmirch the environment. That was not always so. When the first settlers landed in this country, they didn't worry about the environment. If they were interested in environmental protection at all, it was protection from it, not of it. And for a couple of hundred years thereafter, there were few sights more welcome to the traveler than the sight of factory smoke curling above the tree tops.

Similarly, during the great depression, there was no great clamor for safety in the workplace. If a man were fortunate enough to find a job, he didn't worry about where the fire extinguishers were located, nor ask whether the rungs on the fire escape were 16 or 18 inches apart. He took the job and was happy to have it.

I am not suggesting that the distance between the rungs on a fire escape is not a legitimate concern today, only that there is nothing absolute about the value we assign to it. Concern for safety was not discovered under a pile of debris in the public subconscious; it emerged as an important public value in response to changing circumstance.

And circumstances continue to change. Income levels change, leisure time expands, people move from the country to the city or from the city to the country, resource bottlenecks occur and are relieved by new technologies—all of these things alter society's values and, with them, its definition of responsibility.

Anyone who doubts that need only look at what the energy crisis has done to the environmental movement in the past several years.

The definition of responsibility also changes as knowledge expands. One day we are worried about ring-around-the-collar, the next day it's phosphates in the fishsticks.

So the question of how to define responsible behavior is indeed difficult. The cynical might say that minimum acceptable responsibility on any given issue is whatever level is just enough to placate the public and prevent it from going to the Congress. But that's not much help. It tells how to measure; but it doesn't tell what to measure.

To know what to measure, a corporation somehow has to ascertain what the public's concerns are. And corporations simply aren't well set up to do that. They may be good at measuring and forecasting shifts in demand for their products, but they lack mechanisms for discovering shifts in public opinion with respect to so-called externals.

Government, on the other hand, is a lightning rod for complaints about externals. Government may be poor at allocating resources which the private market does so well, but government is a very effective mail drop for the gripes and problems of the general public.

That being the case, it should not be necessary for the corporate executive to climb to the roof of his factory and wet his finger to measure the shifting winds of public opinion. It wouldn't hurt to try it from time to time, but he needn't rely on it. Because most of the information he needs in order to act responsibly is already available from people who will willingly share it with him.

Of course, it will not get shared if business and government insist on regarding one another as adversaries; if they meet only in court, and always with the attitude that the briefer the contact the better.

What is needed is recognition of the fact that there is a triangular community of interest between government, business and the public. We have already established that it is in business's interest to shape its behavior to prevailing public values; and that it is more efficient to do so than not to. We have established too that government is the high-cost alternative through which public values are imposed on corporations that do not accurately perceive these values.

Obviously it would be much more efficient if a larger proportion of government's energies could be devoted to acquainting corporations with public expectations so they could accommodate them voluntarily, and a smaller proportion to administering regulations. The country would get better results because corporations would remain free to be innovative in addressing public needs, and these results would come at lower cost because corporations would not have to incur and pass on to the consumer the cost of all the unforeseen side effects which seem inevitably to accompany mandated solutions.

A continuing dialogue between government and business will improve the quality of public policies as they impact on business. In the months ahead, this Administration will face difficult policy choices on anti-inflation policies, regulatory reform, the Arab boycott, international trade, and many other issues. We need the advice and constructive criticism of the business community before making final decisions that affect it. As Secretary of Commerce, I intend to provide a means for a continuing exchange of views between business and government.

Joint efforts by business and government to identify public values and the course of responsible behavior will not always be enough. Even the threat of government intervention will not prompt behavior modification if that modification threatens serious competitive disadvantages to the firm.

And this is often the case. Most reforms—cleaning up factory emissions, or training the hardcore unemployed—entail high startup costs. Even the well-intentioned corporation cannot always afford to assume such costs if its competition is not prepared to do likewise.

"... it would be much more efficient if a larger proportion of government's energies could be devoted to acquainting corporations with public expectations so they could accommodate them voluntarily, and a smaller portion to administering regulations."

Social conscience can be an expensive proposition to the corporation but trade associations are already devising codes of behavior to spare their membership further costs.

Take the case of two factories which dump effluents into the same river. Neither by itself produces enough pollution to be a problem, but in the aggregate they dump enough into the river to raise the threat of government intervention. Either factory could avert intervention by cleaning up its act. But by doing so it would be buying salvation for a competitor. The irresponsible competitor, having gotten a free ride, would be able to use cost advantage to undersell the socially responsible firm—and virtue would be its own undoing.

Obviously, where this or similar situations exist, a social conscience can be an expensive proposition. And the likelihood is that both firms will simply sit back and wait for the other to act first.

This, it seems to me, is an area in which associations such as the NAM can rescue their members from the ever-rising costs. In fact, there are many trade associations that already enforce codes of behavior for the express purpose of sparing their membership further federal regulation.

For instance, under threat of FTC action, the National Advertising Review Board has set standards of practice designed to insure that the public is not misled by distortions. This action has in turn spawned a number of local review boards dedicated to the same purpose.

Such standards serve the public interest by offering free protection from abuse and by offering such protection before the abuse becomes so acute that the public is moved to take matters into its own hands. Still, it is a mistake to regard such standards as gratuitous and philanthropic, for they also serve the corporate interest. They represent self-interest accurately perceived—a prophylactic against the high cost alternative of government regulation.

Often, suggestions that self-regulation be more widely practiced by trade associations bring objections that this would somehow create problems of antitrust liability.

This fear is surely exaggerated. Antitrust laws expressly prohibit collusive pricing, tie-in arrangements, market segmentation and other anti-competitive practices. They say nothing that might be construed as preventing a trade association from urging on its members the collective assumption of responsibility toward the society in which they operate.

In dealing with this question of corporate social responsibility, I realize that I have emphasized only the pragmatic. I do so intentionally, for corporate responsibility is too often discussed as though it were a matter of conscience alone.

Corporations well understand that, in the long run, behaving responsibly toward society is not a choice but a requisite. Corporate managers today must live with hundreds and hundreds of externally-imposed rules and regulations. Many of these rules govern aspects of corporate behavior which managers in an earlier time regarded as private and discretionary. Had they understood what even the most absolute medieval nobles understood—that ultimately their authority to determine their behavior depended on how the behavior accorded with the interests of their constituents—many of these regulations would not exist today.

It certainly should be apparent to corporations that it is in their interest to be responsive to the values of a voting public.

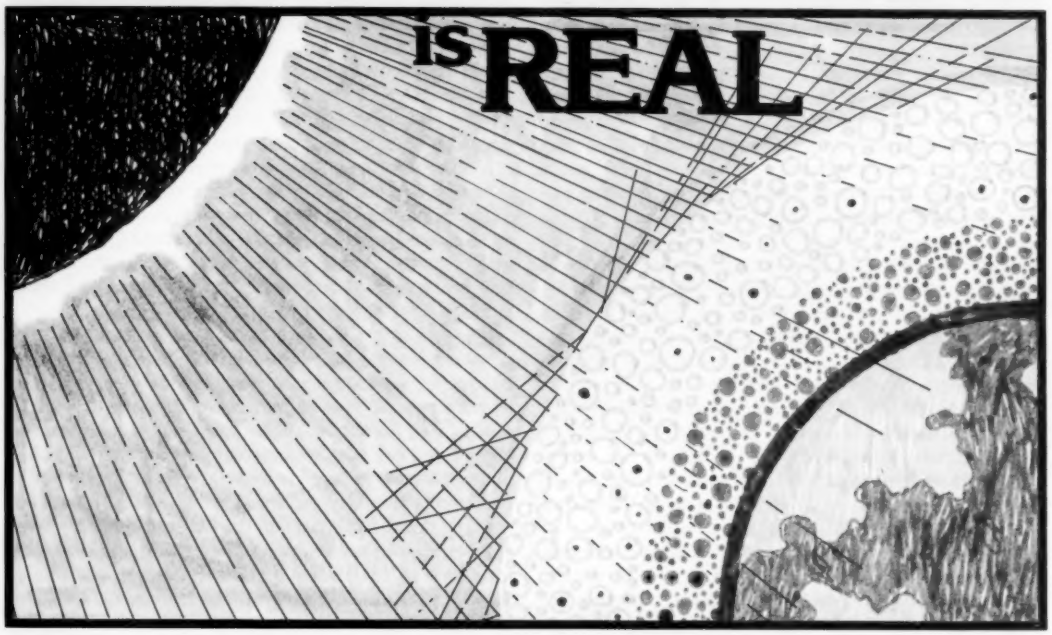
Again, I do not suggest that it is a simple task. Public opinion is a fickle thing, given to frequent false starts and occasional treks up blind alleys. Obviously, not every whim marks the beginning of a trend, nor every trend a permanent change of direction. Determining the course of responsible action will not, therefore, be free of frustrations.

But there are some things that executives can do that will minimize these frustrations. They can examine available polls and studies of public opinion—careful interpretation of these will offer some guidance as to what people are thinking.

They can also make greater use of the indicators of public opinion available in government. If government agencies have information that firms need to solve a problem before it leads to regulation, we urge them to utilize it; indeed, we will help interpret the signals, if requested.

The interest of this government is less government. We are firm believers that anything government does to regulate business, business could do better on its own. For the next four years, at least, business will have an Administration that is sensitive to the need for greater private efforts and fewer public constraints.

Spate of International Conferences Confirms OZONE THREAT IS REAL



Continuing world concern about products potentially hazardous to the earth's ozone shield brings 15 representatives of major industrialized nations which are the principal producers of chlorofluoromethanes (CFMs) to a meeting in Washington this week at the invitation of the U.S. Environmental Protection Agency. And a month later, an action plan for a worldwide campaign against all ozone destroyers will be proposed to the United Nations.

The Washington meeting will consider global regulatory measures which may be adopted to prevent damage to stratospheric ozone by release of CFMs. The U.S. produces about half of the world's CFMs which are used as propellant gases in aerosols.

This coming meeting and one held under United Nations sponsorship in Washington recently point up once again the urgency of developing a better understanding of the impact of man-induced pollutants on the earth's ozone shield, which protects all life from damaging ultraviolet radiation.

A group of international experts of the United Nations Environment Program (UNEP) proposes to present a World Action Plan to attack this problem to the UNEP Governing Council when it meets in Nairobi in May. If adopted by this body, it will become a basis for action.

Among global environmental threats, those to the stratospheric ozone layer "are among the most complex and insidious," Dr. Robert M. White, Administrator of Commerce's National Oceanic and Atmospheric Administration (NOAA) told the recent UN conference.

"It is being suggested," he said, "that we curtail certain important economic, industrial and possibly agricultural activities now because later we will incur some very major penalties. If we heed the advice we would never know, except through scientific argument, that the effect would indeed follow the cause. If we ignore the advice, and those scientific arguments are correct, we will have ushered in human discomforts that we will be powerless to stop.

"The problem is further heightened because the hazards, as opposed to the effects themselves, are subtle. We would not directly feel or see changes in ultraviolet radiation from the sun, and probably most of us would go through life unaffected.

"Should there be climate changes brought on by alteration of the ozone layer, they would not be evident except after years of accumulating hardships and dislocations and struggling to feed the world's hungry population. It is not easy to distinguish a sequence of a few anomalous seasons from a subtle fluctuation in climate . . .

"We are not in position to conduct experiments to examine cause and effect, because there is no way to duplicate the conditions we find in nature. Instead we turn to our knowledge of the basic physical processes expressed through mathematical models and computers. It is on the basis of these

models, and the accompanying verification of their calculations through observation, that we predict the effects we seek to avoid. The models and conclusions depend rather critically on some very difficult measurements, some of which we have just begun to learn to make, and all of which are subject to uncertainty. Indeed, science is not yet capable of some of the very important measurements."

Dr. White recalled that understanding of the stratosphere was improved dramatically as a result of a recent three-year research study of the potential environmental impact of supersonic transports.

"Two broad conclusions emerged," he said. "First, rather than one threat to stratospheric ozone, there are potentially many, including high flying aircraft, both subsonic and supersonic, nuclear bursts, halocarbons, volcanoes, and nitrous oxide from nitrogen-fixed fertilizers.

. . . no one nation can solve the environmental problem arising from man's capability to disturb the earth's upper atmosphere . . .

"Second, simulation modeling can provide quantitative estimates, reliable within a factor of 2 or 3 (200 or 300 percent), of the effects on ozone arising from the various threats. The ozone layer was thus identified as a possible Achilles' heel for man's impact on the atmosphere."

Dr. White emphasized that no one nation can solve the environmental problems arising from man's capability to disturb the earth's upper atmosphere, and "no nation has a monopoly on the production of substances which may perturb the upper and lower atmosphere." Also, he pointed out that "the threat to the ozone is perceived as one for which cause and effect may be widely separated in time.

"Clearly any regulation," Dr. White said, "if not agreed to internationally would be of limited value. But decisions on regulations must be based on thorough evaluation of all the scientific evidence."

U.S. representatives are expected to explain regulatory procedures followed in this country and to urge other industrialized nations to participate in joint action in dealing with the CFM problem.

Heading the U.S. delegation at the recent UNEP meeting was Dr. Edward S. Epstein, NOAA Associate Administrator for Environmental Monitoring and Prediction. Dr. Epstein told conferees this country is engaged, together with a number of other nations, in a large research effort to assess the effect of human activities on the stratospheric ozone concentration and the resulting effects of ozone depletion.

The U.S. investigations, he explained, have focused on several areas of human activity which tend to increase the supply of ozone-destroying substances in the stratosphere. Included, he said, are: aircraft engine emissions in the stratosphere or upper troposphere; release of CFMs in the atmosphere; and release of nitrous oxide in the atmosphere.

Dr. Epstein pointed out that the tentative conclusion of the National Academy of Sciences, based on available data and current understanding, "is that the release of CFMs at the 1973 production rates will reduce the ozone balance at a steady state by about 7 percent, with a possible range of from 2 to 20 percent.

"The ozone depletion," he said, "is presently estimated to reach an equilibrium level within the range of from 2 to 20 percent. The overall amplification factor can be in the range from 2 (200 percent) to greater than 6 (600 percent). The resulting effect to skin cancer rates can range from 4 to greater than 120 percent. Therefore, it is important to more accurately quantify this cause-effect or dose-response relationship for both melanoma and non-melanoma skin cancer types."

Dr. Epstein said that, beginning this month, a special one-year effort will be launched to investigate non-melanoma skin cancer at different latitudes, and that discussions are in progress with some other nations to extend this reporting.

The purpose of research on biological effects other than human, he explained, is to assess the impact of additional damaging ultraviolet radiation on terrestrial and aquatic organisms, especially those used for food production, and to determine the ecological significance of additional damaging ultraviolet radiation.

"Ozone diminution," he said, "may threaten changes in the climate of the stratosphere and the earth's radiation characteristics. These changes may result in alteration in the earth's climate. The potential adverse effects on man and the biosphere by inadvertent modification of the stratosphere is a global problem that deserves serious attention on an international scale."

Dr. Epstein commented that the U.S. has undertaken an extensive study on the possible impact of aerosol regulation, and has been cooperating with industry trade associations, the chemical firms, and the aerosol fillers and marketers in the matter. If regulation of other ozone-destroying substances is considered, he added, similar assessments will be carried out in cooperation with the affected industry.

Donald H. Hunt, of NOAA, chairman of an interdepartmental working group for monitoring the stratosphere, says that ozone and other stratospheric measurements are made at a large number of ground stations located primarily in the United States and Canada and the countries of Western Europe.

This work, he explains, in being expanded by measurements from satellites. To date it has not been possible to take ozone measurements over the oceans, which comprise nearly 70 percent of the earth's surface. Satellites will correct this deficiency.

Some measurements already have been taken from satellites, Hunt says. This information is now being analyzed, and is expected to be ready for distribution to the scientific community early next year. Information obtained by field measurements is sent to the World Data-Center (Ozone) in Toronto, Canada, from which it is distributed to the international scientific community.

Ozone measurements are a complex process, but by this means, Hunt explains, an attempt is made to determine its concentration and distribution.

Meanwhile, he says, detection of long-term trends in the ozone layer is difficult because of natural variability which occurs despite man's activities.

Against the background of the varied work now being done, the World Action Plan to be proposed at the UNEP meeting will serve primarily to coordinate the research and evaluation under way among nations and specialized international organizations. Hunt says that all nations will be asked to participate in the global effort to the extent that they can.

The World Meteorological Organization (WMO) has worked out a global research and monitoring program to determine what is happening to the ozone layer. The World Action Plan calls for support for this program. Other specific recommendations in the plan include:

- An improved system, including appropriate ground-based, airborne, and satellite subsystems, for monitoring and prompt reporting of global ozone, its vertical, spatial, and temporal variations, with sufficient accuracy to detect small but statistically significant long-term trends.
- A system for monitoring the intensity and spectral distribution of solar radiation at ground level and above the earth's atmosphere to better understand the formation of ozone, to determine variations of solar flux and to clarify the influence of such variations on the earth's radiation budget.
- An intensive short-term program of simultaneous measurements of selected species in the odd-nitrogen, odd hydrogen, and odd-chlorine families to provide a better understanding of the ozone balance and to test the model predictions.
- A broad program to accurately determine chemical and photochemical reaction rates and quantum yields at appropriate temperatures and pressures, to provide accurate atomic and molecular line strength and location data for use in laboratory and remote sensing measurements of trace species, and to assess the sensitivity of chemical reaction schemes used in atmospheric models.
- Improved computational models by which the interrelationships of chemical, radiative, hydrodynamic and thermodynamic processes controlling the troposphere and the stratosphere in both their natural and perturbed states may be established.
- Develop a much-improved understanding of the budgets of atmospheric constituents which affect the ozone balance, including their sources and sinks. At present this would require particular emphasis on the chlorine and nitrogen systems.

Another section of the action plan calls for support and coordination of the wide variety of investigations of the effect of ozone layer modification and increased ultraviolet radiation on man, the biosphere, and the climate.

It has been shown that large increases in injurious ultraviolet radiation can cause biological damage, including damage to nucleic acids and proteins. Some evidence is cited that increased radiation levels would be associated with a greater incidence of skin cancer in humans and possible eye damage to cattle.

Recommendations by the action plan include:

—Monitor the spectral distribution and intensity of damaging ultraviolet radiation at the earth's surface. This should be done for at least a complete solar cycle at globally distributed sites and where possible at stations where ozone is being measured, skin cancer data collected, and effects on plants studied. A solar cycle extends over 11 years

—Develop improved instrumentation and methods, including improved artificial sources, for measuring and providing precise levels of ultraviolet irradiance, both broad-band and narrow-band.

—Develop standardized methodologies for research on damaging ultraviolet radiation.

In the area of human health, the action plan calls for obtaining improved worldwide statistics of skin cancer incidence and analyzing such data in relation to latitude, types of cancer, age at onset, and other factors.

The plan also proposes a study of the potential impact of increased ultraviolet radiation on human health other than the area of skin cancer, development of a model for predicting human photobiological response for various skin types, genetic and ethnic background and environmental factors, and research and modelling on the mechanisms of Vitamin D production and effects.

Still other recommendations will include:

—Conduct studies on the physiological, biochemical, and structural responses, as exemplified by changes in photosynthesis and nitrogen fixation, to increases in damaging ultraviolet radiation of selected native and agricultural plants, animal species, and microorganisms, and develop predictors of ultraviolet sensitivity.

—Study the effect of changes of ultraviolet radiation on aquatic plants and animals emphasizing those related to primary productivity in the oceans.

—Study the effects of changes in damaging ultraviolet radiation on the stability of agricultural chemicals and the resulting effects on crop yields and agricultural chemical usage patterns.

—Further develop modelling capability to assess the effects of ozone changes and also those of CFMs and other compounds with similar effects on the earth's radiation balance and the global climate. A data base for testing such models should be provided.

—Conduct research on regional climate and its variability to provide better evaluations of the effects of these changes on critical climatic regions.

—Obtain more detailed data on man's present and projected activities in and near the stratosphere and on global production, emission and use of substances that have the potential to affect stratospheric ozone.

—Develop improved methodologies, including multidisciplinary systems analysis, for assessing the costs and benefits associated with various levels of use of CFMs, aircraft emissions, and use of nitrogen fertilizers and other potential modifiers of the stratosphere, whether controlled or not.

In short, the ozone problem has come down to earth and has become a matter of dollars and cents.

"... it is important to more accurately quantify ... cause-effect or dose-response relationship for both melanoma and non-melanoma skin cancer types."

Energy Digest

SOLAR INSTITUTE SITE . . . The Midwest Research Institute, with an initial site in Golden, Colorado, has been selected to manage and operate the nation's Solar Energy Research Institute (SERI). In addition, the Energy Research and Development Administration has decided that the most effective way to encourage widespread use of solar energy is through a regionally diversified effort. Therefore, ERDA will work with regional organizations to establish additional components of a national SERI effort. The procurement calls for a five-year contract, with first year costs estimated between $4 and $6 million. With an initial staff of up to 75 professionals, the institute will function in concert with the extensive solar energy work already under way and planned at universities, industries, national laboratories and other federal, state and local government agencies across the country. Its primary mission is aimed at fostering the widespread use of all aspects of solar technology—including direct solar conversion (photovoltaics), solar heating and cooling, solar thermal power generation, wind, ocean thermal conversion, and biomass conversion—and thus create major alternative energy sources in all regions of the nation.

NUCLEAR WASTE DISPOSAL . . . Technology already exists for safely and reliably disposing of high-level nuclear waste from electric power-generation reactors, according to a scientist at the Battelle Memorial Institute's Northwest Laboratories in Richland, Wash. Dr. Gary J. Dau says, however, that before it can be put into practice the Federal Government must set the policy and criteria by which such wastes will be isolated and stored—and then demonstrate a full-scale disposal facility. The disposal system he recommends is one that converts high-liquid waste to a solid and immobilizes it in glass for burial deep underground in remote areas.

LIQUIDS VS. GAS . . . In the longer term ,the U.S. needs a substantial synthetic fuels capability based on coal and oil shale that can be readily expanded when necessary, points out Henry R. Linden, president of Chicago's Institute of Gas Technology. The problem for energy policy planners is that, currently, synthetic liquid fuels would cost at least twice and probably three times what the mix of domestic and imported oil costs, he says. "Therefore, at current discount rates, the prospects for future profitability are too uncertain for private industry to make a major investment without some form of government guarantee. The situation with synthetic gaseous fuels is different because, in many instances these fuels are economically competitive with other alternatives to natural gas from the lower-48 states, which is in increasingly short supply. The need for government support in this case is due to lack of investor confidence," says Linden. "There is concern also over the possible impact of such huge investments on the financial health of the relatively small corporate entities in the gas industry."

SENSING GEOTHERMAL ENERGY . . . A super sensitive device has been developed with the potential of finding new underground geothermal energy sources without drilling. This device has been used to explore down to depths of 20 kilometers, and measurements down to 50 kilometers should be possible. ERDA is considering further tests of the instrument in regions of likely geothermal activity. They could determine not only the existence of a geothermal source but also give some indication of its size. Its usefulness for other geophysical prospecting processes, including the search for uranium and other ore bodies, needs to be demonstrated but appears likely. Additionally, this technique has some potential for earthquake prediction.

HEAT EXCHANGER CONTRACT AWARD . . . TRW of Redondo Beach, California, has been selected for negotiation of a contract to provide the design and fabrication of heat exchangers for ERDA's Ocean Thermal Energy Conversion (OTEC) program. The heat exchangers will be installed on ERDA's Early Ocean Test Platform, a 300-ft. long converted barge. They will be part of a test loop designed to simulate a one megawatt (electric) generation cycle. This would serve to validate OTEC heat exchanger performance in an ocean environment. TRW was selected from among four industrial teams who responded to ERDA's request for proposals.

PILOTLESS GAS RANGES . . . Americans could save almost $300 million a year on fuel bills, and conserve almost 150-billion cubic feet of gas a year, by using ranges with automatic pilotless ignition rather than those with pilot lights, according to Kenneth J. Haas, president of Caloric Corp. Pilot lights consume approximately 30 percent of the total gas used by an average range, Haas says.

Still No Sign Of Relief From Western Drought

CALIFORNIA PRECIPITATION AT ALL-TIME RECORD LOWS; SNOWS ELSEWHERE SEEN HAVING MARGINAL IMPACT

The drought outlook for the western United States continues to be grim, according to hydrologists of Commerce's National Oceanic and Atmospheric Administration (NOAA) and Agriculture's Soil Conservation Service.

In the April issue of *Water Supply Outlook, 1976-77, for the Western United States*, NOAA's National Weather Service hydrologists report little improvement over most of the area during March.

Precipitation during the month varied widely, ranging from well below normal in California and most of the Colorado and Great Basins to as much as five times over normal in some headwater areas of the Missouri River. However, except for these areas of the Missouri Basin, March precipitation was not sufficient to bring anticipated snowmelt runoff for the water-year ending next September 30 to near normal, and the outlook for large areas remains critical.

In California, March precipitation again was below normal, setting record lows for the sixth consecutive month at many stations. The water equivalent of the season's snowpack varies from 5 to 26 percent of normal in the San Joaquin Basin and 15 to 30 percent of normal in northern California streams.

Streamflow forecasts range from 5 to 27 percent of the 15-year average in the San Joaquin Basin and 15 to 40 percent of the average in northern California. Flows are expected to be below the previous minimums of record on many streams.

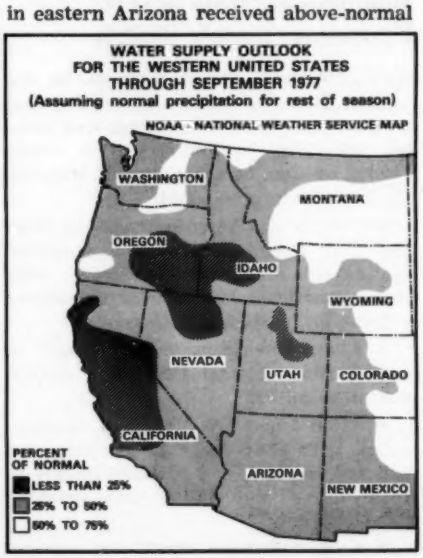
Much of the Columbia River Basin received near-normal precipitation during March, with above-normal amounts reported at higher elevations of the Cascade Range. Water equivalent of the snowpack in the area ranges from about 15 percent of the 15-year average in central Idaho to as much as 75 percent of the average in central Oregon. Runoff at The Dalles, Ore., is expected to be 52 percent of the average—an increase of 2 percent over the March 1 forecast.

Record low flows are indicated on many streams measured by the U.S. Geological Survey for the Columbia Basin this spring and summer. The outlook for the north Pacific coastal drainage in Oregon and Washington remains bleak, with little change from March 1. Runoff is forecast at from 40 to 70 percent of the 15-year average.

Although the mountains of northern Utah received above-normal precipitation during March, ranging up to 200 percent of normal at Salt Lake City, which had a record March snowfall, precipitation over the Great Basin generally was below normal.

Forecasts of runoff are about 50 percent of the 15-year average on northern Utah streams, the Sevier Basin in southern Utah, and the Owens Basin in California. Elsewhere, runoff is expected to be 20 to 40 percent of the average, except in the Carson and Humboldt basins where it will be less than 10 percent.

The Little Colorado and Gila Rivers in eastern Arizona received above-normal precipitation during March, but the rest of the Colorado River Basin generally had well below normal precipitation. Amounts varied greatly, however, ranging from zero to 125 percent of normal. Seasonal precipitation amounts are also well below normal—less than 50 percent of normal at many stations, except for the Little Colorado and Gila Basins which have seasonal accumulations of 60 to 100 percent of normal.



The streamflow outlook for the remainder of the water-year ranges from 17 to 61 percent of the average and is generally in the range of 30 to 45 percent.

Storm is little relief

Although a major winter storm moved through the Colorado and New Mexico Rockies early in March, seasonal precipitation totals remain below normal. The streamflow outlook is generally poor, with less than 50 percent of the average runoff expected in the Arkansas and Rio Grande Basins. Forecasts on the Pecos River are for 70 to 85 percent of the 15-year-average runoff and for 65 percent of average on the Canadian River.

The streamflow outlook improved significantly during March in the upper Missouri Basin, as precipitation ranged from 150 to 500 percent of normal over the Missouri River Basin above Fort Peck, Mont., and over the Yellowstone and Milk River Basins. Forecasts of runoff are for about 85 percent of average in the Milk River Basin and 50 to 70 percent of average on the Missouri River above Fort Peck.

In the Yellowstone Basin, the Tongue and Powder River, drainages are expected to amount to 110 to 115 percent of average, while the rest of the basin will have about 60 percent of average. No improvement is expected in the Platte Basin, where runoff is forecast at 45 to 55 percent of average.

Price Increases Negate Household Income Rise

Median money income of U.S. households in 1975 was $11,800, an increase of about 5 percent over the revised 1974 median, according to a report from Commerce's Bureau of the Census. However, this increase was eroded by a 9 percent rise

in prices between 1974 and 1975 which resulted in a net loss of about 3 percent in real purchasing power.

In developing the 1975 estimates, the processing system was revised to take advantage of new computer facilities at the Census Bureau, and the 1974 estimates were recomputed in order to make valid comparisons between the two years.

Household income differs from family income, in that households are made up of related or unrelated persons and also may be made up of just one person. Families are composed of two or more related persons.

Aggregate household money income increased by 7.7 percent between 1974 and 1975 because of a 2.4 percent increase in the number of households (1.7 million additional households) and a 5.2 percent increase in average household money income.

Of 72.9 million households in the U.S. in March 1976, 8.5 million (11.6 percent) had incomes of $25,000 or more. In 1975, these households received about 30 percent of aggregate income. Another 18.6 million (25.5 percent) had incomes ranging between $15,000 and $25,000 and received about 35 percent of aggregate income. At the other end of the scale, 14.5 million households (19.9 percent) had incomes under $5,000 and received about 4 percent of the total aggregate income.

Copies of the Census Bureau report, *Household Money Income in 1975 and Selected Social and Economic Characteristics of Households,* P-60, No. 104, may be obtained for $2.00 each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 or from Department of Commerce District Offices in major U.S. cities.

Directory Indexes Over 2,000 Mailing List Producers

The completely revised 1977 edition of *Directory of Mailing List Houses,* the first new edition in four years, has recently been published. It contains information on more than 2,000 mailing list firms, compilers, brokers and mailing list managers.

Firms are listed geographically, with name, address, year of organization, phone number, manager, kinds of lists handled and other information included. A cross-index by categories—more than 100, such as science, industry, business, education or religion—allows the list user to see at a glance all the firms handling or specializing in certain types of lists.

The *1977 Directory of Mailing List Houses* is available at $30 from B. Klein Publications, P.O. Box 8503, Coral Springs, Fla. 33065.

SUN BELT IS LARGEST GAINER IN MID-DECADE COUNT OF U.S. CITIES

Everyone knows that New York is the country's most populous city, and most are aware that Chicago is still No. 2, although third-place Los Angeles continues to close the gap. But once past the first half-dozen standbys, the casual observer needs a scorecard to keep track of the population changes in America's cities.

Fortunately, Commerce's Bureau of the Census has just published such a mid-decade scorecard, estimating the population changes in the most populous U.S. cities between the 1970 Census and 1975.

Reflecting the growing strength of the Sun Belt, San Diego and San Antonio have surged into the top ten for the first time. They join Los Angeles, Houston and Dallas, to give the Southwest five of the nation's ten largest cities.

There were also ten more 100,000-person cities than there were only five years before.

And cities don't inch up and down the standings anymore: the cities that dropped out of the top ten went to 12th (Washington, D.C.) and 18th (Cleveland) places!

Further evidencing the continued population growth in the Southwest, several other cities in that area also climbed several rungs on the population ladder: Phoenix went from 21st to 15th; San Jose from 30th to 21st; and El Paso from 45th to 33rd.

A number of cities in the Northwest dropped in rank. Seattle moved from 23rd to 25th place and Portland from 36th to 40th place. Further south, San Francisco dropped from 13th to 16th place.

In the Northeast, New York City remained the largest city despite a sharp loss in population over the five years, while Boston, Buffalo and Newark, all with population losses, dropped several places from their 1970 ranking.

In the North Central Region, Chicago retained its No. 2 rank nationally despite a drop in population, but several other cities in the area, including Milwaukee, St. Louis, and Minneapolis, dropped in the ranking.

Seven of the top ten cities in the ranking and a total of 14 of the 20 largest lost population during the five-year span. Among the top 10, only Houston, San Diego and San Antonio showed gains. In the second 10, only Honolulu, Phoenix and Memphis gained.

Commerce America has devised a quick quiz to help dramatize some of the changes of recent years. Name the larger city in each of the following pairs: Omaha or Tampa; Anchorage or Atlanta; Spokane or Raleigh; Toledo or Fort Worth; San Jose or Miami; Warren, Mich. or Salt Lake City; Anaheim or Providence; Columbus, Ohio or St. Louis; Yonkers or South Bend; Norfolk or Savannah. Which is the largest of the 20? The smallest?

If you named the first city of each pair, then score yourself 100 percent. The largest is San Jose, barely edging out Columbus. The smallest: Savannah.

A table showing the ranking and population of all 162 of the nation's cities with 100,000 or more residents appears on the following page.

Asian-American Owned Businesses' Role In U.S. Economy: Barely Visible

Asian-American owned business in the United States is small, undiversified and confined mainly to retail trade and service industries, according to a study funded by Commerce's Office of Minority Business Enterprise (OMBE).

The study was based on statistics from the 1972 Census Report, supplemented by extensive personal contacts with Asian Americans and their organizations.

Some of the study's findings:

- Asian Americans own one-half of one percent of total U.S. firms (66,000 out of 13 million).
- Asian-American firms are undiversified, with 63 percent in retailing and selected services, and confined largely to food stores and eating and drinking establishments.
- Asian-American firms are concentrated mainly in Hawaii, California, New York, Illinois and Washington.
- Nearly 52 percent of Asian-American proprietorships had less than $5,000 annual gross receipts.

Asian-American involvement in banking and other financial institutions is minimal and Asian-American trade groups and chambers of commerce are either non-existent or relatively inactive.

OMBE is studying new initiatives to help overcome some of the obstacles faced by Asian-American business executives as revealed by the study, such as new technology and changes in the market place.

The study, *Socio-Economic Analysis of Asian-American Business Patterns,* is available in limited quantities from the Information Center, OMBE, U.S. Department of Commerce, Washington, D.C. 20230, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at a price of $1.80 each.

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Rank Of U.S. Cities, By Population

Rank 1975		Est. 1975 Population	1970 Rank	1970 Census Figure	Rank 1975		Est. 1975 Population	1970 Rank	1970 Census Figure
1	New York	7,481,613	1	7,895,563	82	Springfield, Mass.	170,790	87	163,905
2	Chicago	3,099,391	2	3,369,357	83	Salt Lake City	169,917	77	175,885
3	Los Angeles	2,727,399	3	2,811,801	84	Madison	168,196	81	171,809
4	Philadelphia	1,815,808	4	1,949,996	85	Kansas City	168,153	75	178,889
5	Detroit	1,335,085	5	1,514,063	86	Providence	167,724	74	179,116
6	Houston	1,326,809	6	1,253,479	87	Gary	167,546	70	188,398
7	Baltimore	851,698	7	905,787	88	Jackson	166,512	88	162,380
8	Dallas	812,797	8	844,303	89	Lubbock	163,525	94	149,101
9	San Diego	773,996	15	697,027	90	Lincoln	163,112	93	152,639
10	San Antonio	773,248	14	708,582	91	Chattanooga	161,978	84	166,947
11	Indianapolis	714,878	11	729,768	92	Anchorage	161,018	116	126,385
12	Washington	711,518	9	756,668	93	Columbus, Ga.	159,352	85	166,565
13	Honolulu	705,381	18	630,528	94	Greensboro	155,848	95	147,948
14	Milwaukee	665,796	12	717,372	95	Montgomery	153,343	100	140,102
15	Phoenix	664,721	21	589,016	96	Fort Lauderdale	152,959	102	139,590
16	San Francisco	664,520	13	715,674	97	Tacoma	151,267	92	154,407
17	Memphis	661,319	16	657,007	98	Riverside	150,612	101	140,089
18	Cleveland	638,793	10	750,879	99	Huntington Beach	149,706	126	115,960
19	Boston	636,725	17	641,071	100	Las Vegas	146,030	117	125,787
20	New Orleans	559,770	20	593,471	101	Rockford	145,459	96	147,370
21	San Jose	555,707	30	461,212	102	Bridgeport	142,960	90	156,542
22	Columbus	535,610	22	540,025	103	Little Rock	141,143	110	132,483
23	Jacksonville	535,030	27	504,265	104	Winston-Salem	141,018	108	133,683
24	St. Louis	524,964	19	622,236	105	Torrance	139,776	107	134,968
25	Seattle	487,091	23	530,831	106	Newport News	138,760	105	138,177
26	Denver	484,531	25	514,678	107	Amarillo	138,743	114	127,010
27	Kansas City	472,529	26	507,330	108	Hartford	138,152	89	158,017
28	Pittsburgh	458,651	24	520,089	109	Huntsville	136,419	103	139,282
29	Atlanta	436,057	28	495,039	110	Paterson	136,098	97	144,824
30	Nashville	423,426	33	426,029	111	Raleigh	134,231	119	122,830
31	Cincinnati	412,564	31	453,514	112	Evansville	133,566	104	138,764
32	Buffalo	407,160	29	462,768	113	Glendale	132,360	109	132,664
33	El Paso	385,691	45	322,261	114	Youngstown	132,203	98	140,909
34	Minneapolis	378,112	32	434,400	115	Springfield, Mo.	131,557	123	120,096
35	Omaha	371,455	42	358,452	116	Erie	127,895	112	129,265
36	Toledo	367,650	35	383,062	117	New Haven	126,845	106	137,707
37	Oklahoma City	365,916	38	368,164	118	Lansing	126,805	111	131,403
38	Miami	365,082	43	334,859	119	Peoria	125,983	115	126,963
39	Fort Worth	358,364	34	393,455	120	Hampton	125,013	122	120,779
40	Portland, Ore.	356,732	36	382,352	121	Macon	121,157	120	122,423
41	Newark	339,568	37	381,930	122	Lakewood	120,350	158	92,743
42	Louisville	335,954	39	361,706	123	Topeka	119,203	118	125,011
43	Long Beach	335,602	41	361,427	124	Hollywood	119,002	144	106,873
44	Tulsa	331,726	44	330,350	125	Garden Grove	118,454	121	121,155
45	Oakland	330,651	40	361,561	126	Aurora, Colo.	118,060	162	76,477
46	Austin	301,147	58	255,869	127	Fremont	117,862	149	100,869
47	Tucson	296,457	55	267,418	128	Hialeah	117,682	147	102,452
48	Baton Rouge	294,394	54	271,922	129	Stockton	117,600	138	109,963
49	Norfolk	286,694	47	307,951	130	South Bend	117,478	113	127,328
50	Charlotte	281,417	53	274,640	131	Livonia	114,881	136	110,109
51	Tampa	280,340	50	277,714	132	Beaumont	113,696	125	117,548
52	St. Paul	279,535	46	309,866	133	Orlando	113,179	151	100,081
53	Albuquerque	279,401	61	243,751	134	Columbia	111,616	129	113,542
54	Birmingham	276,273	48	305,893	135	Independence	111,481	132	111,630
55	Rochester	267,173	49	295,011	136	Garland	111,322	161	81,437
56	Wichita	264,901	51	276,554	137	Arlington, Tex.	110,543	159	90,229
57	Sacramento	260,822	57	257,105	138	Berkeley	110,465	128	114,091
58	Akron	251,747	52	275,425	139	Savannah	110,348	124	118,349
59	Jersey City	243,756	56	260,350	140	Albany	110,311	127	115,781
60	St. Petersburg	234,389	62	216,159	141	Cedar Rapids	108,998	135	110,642
61	Richmond	232,652	59	249,431	142	Portsmouth	108,674	133	110,963
62	Corpus Christi	214,838	63	204,525	143	Pasadena	108,220	130	112,951
63	Virginia Beach	213,954	80	172,106	144	Waterbury	107,065	142	108,033
64	Dayton	205,986	60	244,564	145	Allentown	106,624	139	109,871
65	Mobile	196,441	69	190,026	146	Pueblo	105,312	153	99,978
66	Des Moines	194,168	65	201,404	147	Alexandria, Va.	105,220	134	110,927
67	Anaheim	193,616	86	166,408	148	Stamford	105,151	141	108,798
68	Yonkers	192,509	64	204,297	149	Hammond	104,892	143	107,983
69	Grand Rapids	187,946	66	197,649	150	Chesapeake	104,459	160	89,580
70	Lexington, Ky.	186,048	79	174,323	151	Elizabeth	104,405	131	112,654
71	Shreveport	185,711	72	182,064	152	Irving, Tex.	103,703	154	98,961
72	Fort Wayne	185,299	71	184,989	153	Ann Arbor	103,542	152	100,035
73	Knoxville	183,383	78	174,587	154	Sunnyvale	102,462	156	95,976
74	Syracuse	182,543	67	197,297	155	Cambridge	102,420	150	100,361
75	Colorado Springs	179,584	99	140,512	156	San Bernardino	102,076	140	109,203
76	Santa Ana	177,304	91	155,710	157	Canton	101,852	137	110,053
77	Fresno	176,528	83	167,427	158	Trenton	101,365	146	104,786
78	Flint	174,218	68	193,317	159	Durham	101,224	157	95,438
79	Spokane	173,698	82	170,516	160	Roanoke	100,585	145	105,637
80	Warren, Mich.	172,755	73	179,260	161	Fall River	100,430	155	96,898
81	Worcester	171,566	76	176,572	162	New Bedford	100,133	148	101,777

U.S. COMMERCIAL FISH CATCH AT NEAR-RECORD LEVELS DURING 1976

U.S. commercial fishermen caught more fish last year than in any year since 1962, and more edible fish than in any year since 1952.

Commerce's National Marine Fisheries Service says that the near-record total landings for the year came to 5.4 billion pounds of fish, for a total value of $1,353 million. This was up 39 percent from the value of commercial fish landed in 1975, while the quality landed was 11 percent more, and only four million pounds less than the 1962 record.

Record landings of two important species—tuna, 486 million pounds and shrimp, 404 million pounds—and improved landings of crabs, 345 million pounds; salmon, 309 million pounds; flounder, 165 million pounds; and cod and other groundfish, 157 milion pounds, accounted for a large share of the increase.

Commercial landings of edible species were 2,760 million pounds, valued at $1,264 million, up 14 percent in quantity and 40 percent in value. The quantity landed was considerably above the average for the previous five years.

Landings at U.S. ports of species used for reduction to fish meal and other industrial purposes were 2,590 million pounds, valued at $89 million. This quantity, 7 percent greater than in 1975 and 5 percent above the average for the previous five years, was short of the record amount landed in 1962. The increase was due to heavy landings of menhaden.

The value of processed fishery products (edible and industrial) produced from this catch was $3.2 billion in 1976, up 22 percent over 1975. The value of edible products, which comprise almost 90 percent of the total, was nearly $2.9 billion, up 23 percent. The value of industrial products was $377 million, up 16 percent.

World landings for 1976 have not yet been fully reported, but in 1975 they were 69.7 million metric tons (153.7 billion pounds), down 1 percent from 1974. Japan with 15 percent of the total landings continued to be the world leader in fishery landings, followed by the USSR with 14 percent. The Peoples Republic of China was third with 10 percent, followed by Peru, 5 percent; and the United States, 4 percent. The United States was in fifth place for the third consecutive year.

Despite the outstanding catch several species of fish and other aquatic life off the U.S. coasts are at endangered levels, and this country enacted legislation limiting foreign fishing within 200 miles of U.S. territory during 1976. The law went into effect March 1.

During 1976, U.S. exvessel prices (prices received by fishermen for their landings) moved upward in most months and were at, or near, record levels by the end of the year. The largest gains were for shellfish. The same upward movement was apparent in prices quoted at the wholesale level for fresh, frozen, and canned fishery products.

Per capita fish consumption for the U.S. in 1976 reached 12.9 pounds per person, tying the record set in 1973. This was 0.7 pounds more than the 12.2 pounds eaten in 1975.

U.S. OBSERVERS ASSIGNED TO FOREIGN FISHING VESSELS

The first of an estimated 160 United States observers have been placed on foreign fishing vessels that are permitted to fish within the 200-mile fishery conservation zone, according to the National Oceanic and Atmospheric Administration's National Marine Fisheries Service.

Four observers from the Commerce agency boarded two Japanese crab factory ships when the ships sailed from Hokkaido, Japan, bound for the Eastern Bering Sea. They will remain on the ships until the Japanese reach their quota of 12,500 metric tons of tanner crabs, probably in July.

Under the Fishery Conservation and Management Act of 1976, every foreign fishing vessel must have an annual permit to fish in waters within the 200-mile zone, and must keep authorities advised of its activities within the zone. The terms under which permits are issued allow placement of observers on foreign fishing vessels to collect biological data, information on their catch, information on the types of gear used, and information on the fishing effort of the vessels. In addition, they will monitor compliance with the regulations and terms of the fishing permit.

Observer trips will cost between $2,000 and $10,000, including all direct and management overhead support costs of the Department of Commerce, Coast Guard, Navy, and Customs Service. These costs will be paid by the foreign nations which have observers on board their ships.

Beginning this month, observers were scheduled to be placed on the fishing and processing vessels of Spain, Japan, Italy, East and West Germany, Taiwan, Poland, USSR, France, Romania, South Korea, and Bulgaria during those periods of the year and in the areas in which they have permission to fish.

U.S. observers will board the ships either before they leave their home ports, from Coast Guard vessels at sea, or when the foreign ships enter U.S. ports to pick up the observers.

GOOD CATCH—*U.S. fishermen sort and gut haddock. Last year they set a near-record for quantity of fish landed. Edible species made up the largest catch since 1952.*

SCIENTISTS SEEK SIGNALS OF FUTURE FISH KILLS OFF ATLANTIC COAST

Commerce scientists have begun a series of research cruises off the New York-New Jersey coast, to detect any early environmental signals that could foreshadow another fish kill such as happened last summer.

Conducted as part of the National Oceanic and Atmospheric Administration's Marine Ecosystems Analysis (MESA) New York Bight Project, the series of nine voyages by NOAA ships will coincide with critical seasonal points in the Bight's cycle of plant life, nutrient chemicals, and water motion. The first research cruise was completed in February, with the remainder running through the fall.

Scientists aboard the Commerce Department agency's ships will be searching, in particular, for early indications that waters in the Bight are beginning to stratify—that is, become persistent, stable horizontal layers—as they tend to do during the summer.

Because stratification inhibits vertical mixing, it reduces the flow of life-giving oxygen from surface waters to the colder waters near the bottom. Last year NOAA researchers found that the demand for oxygen in these deep waters exceeded the supply, creating suffocating conditions for Bight creatures unable to move out of the area.

There is evidence that dissolved oxygen in Bight waters decreases annually, beginning usually in April. But in most years, new water entering the Bight from other areas, and the water-stirring storms of late summer, break up the stratified layers before the oxygen in the water has been completely consumed. In those years—and this is the usual case—no fish kill occurs.

But stratification and a decline in dissolved oxygen concentration in February or early March could signal the potential for another fish kill this year. The first two cruises found no evidence of early stratification.

However, whether a fish kill comes or not depends on several other key elements, including a seasonal bloom of phytoplankton, and the flow of nutrients—mainly from sources up the Hudson-Raritan River systems—which feed the bloom and which, last year, apparently caused a population explosion among the marine plants. As the plants died off, they sank to the bottom. Their decomposition there placed intolerable demands on the supply of dissolved oxygen.

At the same time, intense stratification isolated the bottom waters from oxygen nearer the surface, and persistent offshore winds delayed the usual exchange of water through the Bight. These conditions led to the fish kill.

Report Shows Where Profits And Losses Are For U.S. Fishermen

Profits and losses of commercial fishing vessel operations in major U.S. fisheries during periods of rising costs of fuel and oil products are analyzed in a report just issued by Commerce's National Oceanic and Atmospheric Administration (NOAA).

Prepared by NOAA's National Marine Fisheries Service, the analysis evaluates the earning potential of vessel operations in specific U.S. fisheries of the Atlantic, Pacific, and the Gulf of Mexico.

These fisheries accounted for 65 percent quantity and 68 percent by value of total U.S. food fish landings in 1974.

Wide coverage

The report, *Revenues, Costs, and Returns From Vessel Operation in Major U.S. Fisheries*, covers the following fisheries: groundfish, New England and the entire Pacific coast, including halibut fishing; Pacific salmon; tuna, albacore and tropical; shrimp, Gulf of Mexico; and crab, northeast Pacific and Bering Sea. Data for the report were provided by vessel operators participating in various programs of the National Marine Fisheries Serivce.

The rate of return on investment varies greatly among groups of vessels, depending upon size of vessel, type of fishing gear, target species, and location of the fishery. The rate ranges from a low of minus 9.6 percent for a group of shrimp trawlers in the Gulf of Mexico to a high of 30.2 percent for a group of salmon gillnetters in Alaska.

Vessels in a particular fishery demonstrate the following average rates of return on investment and relative fuel costs:

Fishery	Return on investment, %	Fuel cost, as % of gross revenue
Shrimp, Gulf	−0.8	17.6
Halibut, Pac.	0.7	8.6
Groundfish, Atl.	1.2	7.8
Tuna	5.6	10.7
Groundfish, Pac.	6.7	7.2
Salmon, combination vessels	10.6	5.0
Crab, king & tanner	16.5	5.4
Salmon	19.9	2.8
All fisheries	7.0	9.3

Generally, the figures indicate that low rates of return on investment are associated with high fuel costs. Groundfish trawlers in New England, shrimp trawlers in the Gulf of Mexico, some tuna vessels (trollers and purse seiners), and halibut longliners are known to have high fuel consumption because of their fishing systems, or because of long distances to the fishing grounds.

Although there are a few exceptions, salmon vessels that operate close to their home ports reflect the highest rate of return on investment and the lowest relative cost of fuel.

U.S. Factories Consumed 10 Percent Less Fuel In '75

U.S. manufacturing plants consumed 3.54 trillion kilowatt-hour equivalents of purchased fuels and electric energy in 1975, or 10 percent less than the year before. However, the reduced volume of energy consumed cost U.S. plants a good deal more—$23.3 billion in 1975 versus $19.5 billion the year before.

These data appear in the first of the 1975 Annual Survey of Manufactures reports, *Fuels and Electric Energy Consumed*, just issued by Commerce's Bureau of the Census.

The report notes that the decline in energy consumption between 1974 and 1975 resulted from decreased use of each of the major fuels and purchased electricity, rather than from a pronounced decrease in the use of any one fuel type. Natural gas (on a kilowatt-hour equivalency basis) continued to account for slightly more than half of the total energy consumed by manufacturers, with 52 percent of the total compared to 54 percent in 1974.

Unit costs of the individual fuels have fluctuated significantly since 1962, particularly in recent years, with the largest single yearly increase being for natural gas, which rose from $2.21 per thousand kilowatt-hour equivalent in 1974 to $3.25 in 1975. Even with this significant increase, the report points out, natural gas continues to have a lower cost per kilowatt-hour equivalent than any of the other fuels covered in the report.

The report also has data on the individual states. For instance, it shows that manufacturing establishments in Texas used the most purchased fuels and electric energy by far in both 1974 and 1975 of any of the states—598.4 and 530.8 billion kilowatt-hour equivalents respectively—while the No. 2 state in 1974, Ohio, used 308.1 billion and the No. 2 state for 1975, Pennsylvania, 262.6 billion.

The report, designated M75(AS)-4P, is for sale for 25 cents per copy by the Subscriber Services Section (Publications), Bureau of the Census, Washington, 20233, or a Commerce District Office.

Governmental Outlays For Environmental Cleanup Neared $9 Billion In 1975

Environmental quality control cost federal, state, and local governments approximately $8.9 billion in fiscal 1974-75, an increase of almost $2 billion (26.5 percent) over the previous year. A special study released by Commerce's Bureau of the Census found that, of the total outlay, water quality control accounted for $6.2 billion; land quality control (previously classified as solid waste management), $2.3 billion; air quality control, $305.6 million; and other environmental quality control, $117.5 million. This last category includes previously unclassified activities such as noise control, on which $29 million was spent.

The report also includes for the first time a summary of selected revenue and debt transactions related to environmental quality control activities of the 50 states and the largest cities and counties. Such revenues amounted to $1.6 billion in fiscal 1974-75. The major source of this revenue was money received from other governments (including the federal government), which amounted to $879.7 million, or about 54 percent of the total.

State and large local government debt at the end of the fiscal year for environmental purposes totaled $6.3 billion. These governments also issued $743 million in long-term debt during this period.

The federal government spent about $2.9 billion for selected environmental quality control activities in fiscal 1975 compared to $2.4 billion the previous year. It spent about $2.6 billion on water quality, $62 million on land quality, $212.9 million on air quality, and $67 million on other environmental upgrading. Environmental Protection Agency grants for the construction of sewage treatment facilities totaled $1.9 billion, or 81.4 percent of that agency's total outlays and about 67 percent of all federal environmental spending.

State government expenditure increased from $788.8 million to $984 million, a 25 percent increase over fiscal '74. State governments received more than $331 million in revenues for environmental activities and 89 percent of this came from other governments. Six states—Connecticut, Maryland, Massachusetts, Michigan, New York and Ohio—received over two-thirds of this revenue.

Local governments' environmental control spending increased from $6.2 to $7.7 billion. Total direct expenditure of all local governments in fiscal 1975 for water quality control was $5.5 billion, an increase of 30 percent over 1974. This was attributed primarily to a 38 percent increase in sewage construction expense. These governments also spent over $2.1 billion for land quality control.

The report contains a separate breakdown for the 48 largest cities and 58 largest counties, which spent $2.2 billion and $541 million, respectively on environmental quality control. Data for other local governments cover only sewage collection and treatment, trash and garbage collection and disposal, and street cleaning services.

Copies of the report, *Environmental Quality Control — Governmental Finances: Fiscal Year 1974-75,* Special Study No. 83, are available for $1.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 or from Commerce District Offices.

SOUND ECONOMY DEMANDS POLLUTION CLEANUP

In proclaiming Earth Week, which began April 17, President Carter said:

Since the beginning of this decade, we have begun to recognize that our planet's capacity for satisfying the needs of mankind has limits. We have begun to see that we are its stewards, not its masters. Human activities, even well-intentioned ones, can inflict deep and lasting damage to the earth, the air, and the living plants and animals on which we depend. Protection of the environment is a debt we owe to ourselves and to those who will follow us.

During this same decade we have seen the effects of our activities grow increasingly severe. In the poorer nations, population growth on limited land has placed pressure on the environment. In the industrialized world, patterns of production and consumption have increased pollution, begun to deplete resources, and generated hazardous substances which the earth does not naturally assimilate.

Some have questioned whether we can afford to pay the costs of reducing pollution, protecting our health, and preserving our national heritage. The truth is that environmental controls are consistent with a sound economy, and if we ignore the care of our environment our economy will eventually suffer.

Preparing Students For Jobs Covered In New Manual

Helping students prepare for careers shouldn't be a hit or miss operation. A new book, *Placement Services: A Training Manual,* tells how to plan job placement services in school systems to help students obtain employment and keep it. This practical guide was developed after extensive field testing in eight states, in both rural and urban areas.

The Manual explains how to set up, operate, budget, allocate personnel, and manage the program. Among the topics covered are why job placement services by public schools are needed, how such programs work, who can help with career education and job placement, how industry can answer the call, organizing workshops in community resources, helping job-seekers to help themselves, and many others.

Placement Services: A Training Manual is available from Prakken Publications, Inc., 416 Longshore Dr., Ann Arbor, Mich. 48107, priced at $8.45.

Directory Details World Pollution Control Industry

Ecotechnics—a 400-page international directory of environmental protection suppliers—has been greatly expanded for its new edition. For the first time, U.S. companies will be listed, together with new data from Japan, Canada, and Eastern Europe. Listings are also presented from Western Europe.

Printed in English, French, Japanese, and German, Ecotechnics lists 35,000 reference sources, including up-to-date names and addresses of environmental protection manufacturers and service organizations. Listings cover all major environmental concerns: air, water, noise, and solid waste. The directory covers more than 850 product categories.

Designed for environmental protection specialists in private industry, government, consumer groups, research centers and trade associations, Ecotechnics' expansion reflects the growth of the worldwide pollution control industry. A recent Commerce study projected an $11 billion pollution control expenditure by foreign countries in 1978, and more than 50 countries have created government environmental protection agencies.

In addition to product, service, and technology listings, Ecotechnics also features new information on many international organizations such as the World Health Organization and the European Economic Community.

Data on significant environmental laws, regulations, trends, and liability insurance are also included.

Published by ECO Press Ltd., of Geneva, Switzerland, Ecotechnics is distributed in the United States by Fairchild Books, 7 East 12th St., New York, N.Y. 10003. The price is $65.

Apparel Makers Evaluate U.S. Ban On Sleepwear Flammability Chemical

Many participants in a major trade association's early April meeting in Washington were much more interested in what was going on at another meeting across town.

Technical Forum III, the American Apparel Manufacturers Association's (AAMA) third annual meeting, was attended by nearly 200 representatives of industry, government, consumer organizations and universities.

However, the attention of many of those in attendance was focused on the Consumer Product Safety Commission (CPSC) meeting which was considering a matter of vital importance to a number of apparel makers: the use of the chemical Tris (2, 3-dibromopropyl) phosphate in making children's sleepwear flame-retardant. The Commission ruled on April 7 that fabric containing Tris intended for use in children's wearing apparel is a hazardous substance, based on laboratory tests on animals by the National Cancer Institute.

Current flammability standards require children's sleepwear, sizes 0-14, to be flame-resistant. Some fabrics are inherently flame-resistant, but others require the addition of chemicals to meet the standards. All manufacturers of children's sleepwear must meet the flammability standards, but those standards do not require the use of specific flame-retardant chemicals, nor require labeling the flame-retardant chemical used.

Makers of children's sleepwear have used fabric containing Tris in a portion of their goods for the past three of four years, in order to comply with the Commission's difficult flame-retardant requirements. Questions about any possible hazard were not raised publicly until early 1976, and results of a two-year rat experiment just became available.

Following Tech Forum III the AAMA issued a statement saying that "Although the connection between rat-feeding studies and sleepwear safety may be questioned, the Consumer Product Safety Commission nevertheless has made its decision. This action will severely damage all children's sleepwear manufacturers, and will force many to close their doors."

The AAMA statement then listed suggested guidelines to manufacturers and retailers for accepting returns of merchandise containing Tris, as required by the CPSC. According to the Commission ban, consumers who have purchased but not washed any Tris-treated children's garments or uncut fabric are also entitled to a full refund.

The theme of this year's Tech Forum was Performance Requirements for Apparel Products. AAMA's committees on apparel flammability, consumer affairs and material quality sponsored the forum. The American Society for Testing and Materials committees conducted seminars on flammability; marketplace performance—consumer satisfaction and complaints; performance predictive test methods; the need for new test methods and standards; and standards development and enforcement—voluntary or mandatory?

Speakers included Kathleen O'Reilly, executive director of the Consumer Federation of America, and Frank McLaughlin, acting director of the Office of Consumer Affairs, U.S. Department of Health, Education and Welfare. McLaughlin spoke of a "new thaw" in the relationship of Washington business activists and consumer activists, after 10 years of ignoring each other and concentrating solely on obtaining the attention of government. He attributed this to, among other factors, mutual discontent with priorities of several regulatory agencies, the inevitability of some deregulation, and the appointment of several consumer activists to responsible positions in government. He predicted that confidence in business and government will be affected by this relationship.

PLACE IN THE SUN—*Solar energy is moving into the competitive world, and doing quite nicely, thank you. This group of 17 in Hemet, California, was sold within two weeks after completion and the next 16, now under construction, have already been sold. The solar panels are not visible from ground level. The two, three and four-bedroom homes are designed to get 80 percent of their needed heat directly from the sun, and feature extra-heavy insulation, thermostatically-controlled attic fans, indirect fluorescent lights that cut 50 percent off the light bill, electric ignition on the gas stove and oven, and double-glazed windows. They sell for between $35,000 and $45,000 according to builder Warren D. Buckmaster. The designer intends to incorporate solar cooling in future homes as soon as the equipment is available at reasonable cost. The hand-built equipment now available was considered too expensive.*

Microprocessor Courses Offered In Several Cities

A series of short courses on microcomputers and microprocessors has been scheduled for cities around the country and in Canada, beginning in May, by Integrated Computer Systems, Inc., of Culver City, Calif.

The schedule is:

Microprocessor Project Management: Design, Manufacturing, QA and Field Service—May 10, San Diego; May 17, St. Louis; May 31, Ottawa; June 7, Philadelphia; June 14, San Francisco; and June 21, Minneapolis.

Microprocessors / Microcomputers: A Comprehensive Technical Introduction and Survey—May 11, San Diego; May 18, St. Louis; June 1, Ottawa; June 8, Philadelphia; June 15, San Francisco; and June 22, Minneapolis.

Hands-On Microcomputer Programming Workshop—May 12-13, San Diego; May 19-20, St. Louis; June 2-3, Ottawa; June 9-10, Philadelphia; June 16-17, San Francisco; and June 23-24, Minneapolis.

For further information, contact: Integrated Computer Systems, Inc., 4445 Overland Ave., Culver City, Calif. 90230 (213-559-9265).

Papers On Pollution Sought For Conference

Papers on sensing and assessment of pollutants are being solicited for a conference sponsored by Commerce's National Oceanic and Atmospheric Administration (NOAA) and other government departments and professional societies.

The Fourth Joint Conference on Sensing of Environmental Pollutants is scheduled for Nov. 6-11 in New Orleans. Abstracts of papers which participants wish to be received by the program chairman before May 15.

The conference will feature information exchange on sensing methodologies and the evaluation of the consequences of people's interaction with their environment.

The aim is for dialogues between those who set standards, those who perform measurements, and the scientists and engineers who develop measurement and design instruments.

For a list of topics on which papers are desired, and further information, contact: Dr. V. E. Derr, Program Chairman, Fourth Joint Conference on Sensing of Environmental Pollutants, NOAA, ERL-WPL, R45.3, Boulder, Colo. 80302 (303-499-1000, ext. 6567, or for those on the Federal Telecommunications System, 323-6567).

Forms for abstracts can be obtained from Barbara R. Hodsdon, Manager, Divisional Activities & Regional Meetings, American Chemical Society, 1155 16th Street NW., Washington, D.C. 20036 (202-872-4401).

Management Course Offered In Six Cities Plus Canada

The American Management Associations is once again offering its four-part management course in six cities around the country, plus Toronto. The schedule of classes runs from the present through June of 1978.

Topics covered by the course include: managerial dynamics, analytical tools of management, human resource management and leadership laboratory.

Participants are placed in a situation simulating a company that has just lost its president. They must learn enough about finance, R&D, production, marketing and other areas to make decisions, which are fed into a computer for evaluation.

For a copy of the schedule, listing when each of the classes is given in New York City, Atlanta, Dallas, Los Angeles, San Francisco, Toronto and Chicago, write: American Management Associations, AMA Bldg., 135 W. 50th St., New York 10020 (212-586-8100).

Calendar Of Business Events

April 26-27—Knoxville, Tenn.—Energy Mgt. for Business, Commerce & Industry, Hyatt Regency Hotel. Contact: Ron Rader (615-974-5261).

April 28-29—Memphis—Energy Mgt. for Business, Commerce & Industry, Memphis State U. Contact: Dr. Gordan Hopkins (901-454-2173).

Apr. 28-29—Houston — National Conference on Free Enterprise, Rice Rittenhouse Hotel. Contact: Dr. John Ryan, Dean, College of Business, Lamar Univ., Box 10011, Beaumont, Tex. 77710 (713-838-7011 ext. 8426).

Apr. 30-May 4—Palm Springs, Calif.—Solar Energy Conference & Exhibit, Riviera Hotel & Pavilion. Contact: Helioscience Institute, Northrop U., 1155 W. Arbor Vitae St., Inglewood, Calif. 90306 (J. Grant Morey, 213-641-3470 ext. 76).

May 1-4—Pittsburgh—American Mining Congress Coal Convention, Pittsburgh Hilton and William Penn Hotels. Contact: American Mining Congress, Registration Information Center, 1100 Ring Bldg., Washington, D.C. 20036 (202-331-9877).

May 2-13—Chicago—Chartered Industrial Gas Consultant course, Phase III, Institute for Gas Technology. Contact: IGT, 3424 S. State St., Chicago, Ill. 60616 (312-567-3881).

May 4-6—New York—Marketing Strategies for Successful Selling to the Telecommunications Industry Seminar, Park Lane Hotel. Contact: Frost & Sullivan, 106 Fulton St., New York 10038 (212-233-1080).

May 5—Covington, Ky.—Int'l. & Domestic Business Assistance Seminar, Union Heat, Light & Power Co. Sponsors: SBA, N. Ky. Chamber of Commerce. Contact: Commerce Memphis District Office.

May 5-6—New York—Effective Production Planning & Inventory Mgt., New York Sheraton. Sponsor: The Wharton School. Contact: New York Mgt. Ctr., 360 Lexington Ave., New York 10017 (212-953-7262).

May 5-6—Chicago—Technical Marketing Conference, New Mart Plaza-Holiday Inn. Sponsors: American Institute of Aeronautics & Astronautics and Technical Marketing Society of America. Contact: AIAA/TMSA Conference, 444 W. Ocean Blvd., Suite 1403, Long Beach, Calif. 90802 (213-437-7465).

May 5-7—San Francisco—Energy & The Law: Problems and Challenges of the Late '70s, Fairmont Hotel. Contact: American Law Institute-American Bar Assn., Committee on Continuing Professional Education, 4025 Chestnut St., Philadelphia, Penn. 19104 (215-387-3000).

May 6—Hasbrouck Heights, N.J.—Federal Procurement Conference, Sheraton Heights Hotel. Sponsor: U.S. Rep. Andrew Maguire. Contact: Bea O'Rourke, Office of Rep. Maguire, 277 Forest Ave., Paramus, N.J. 07652 (201-262-1993).

May 6—Nashville—Consumer Conference on Energy Conservation, Ellington Agricultural Ctr. Sponsor: Tenn. Division of Consumer Affairs. Contact: Commerce Memphis District Office.

May 9-10—Murfreesboro, Tenn.—Energy Conservation & Development Program, Murphy Ctr., Middle Tenn. State U. Contact: Dr. Jim Ramsey, MTSU (615-898-2527).

May 9-12—Detroit — 1977 Engineering Conference & Int'l Tool & Manufacturing Exposition, Cobo Hall. Contact: Society of Manufacturing Engineers, P.O. Box 930, Dearborn, Mich. 48128 (313-271-1500).

May 9-12—Chicago—Design Engineering Conference & Show, McCormick Place. Sponsor: American Society of Mechanical Engineers. Contact: Clapp & Poliak, Inc., 245 Park Ave., New York 10017.

May 9-12—Chicago—Nat'l Plant Engineering & Maintenance Conference and Show, McCormick Place. Contact: Clapp & Poliak, see address above.

May 9-13—Los Angeles—Maintainability Engineering, UCLA. Contact: Continuing Ed. in Engineering & Mathematics, UCLA Extension, P.O. Box 24902, Los Angeles, Calif. 90024 (213-825-3344).

May 10-12—Gaithersburg, Md.—7th Symposium on Thermophysical Properties, Nat'l Bureau of Standards. Sponsors: NBS & American Society of Mechanical Engineers. Contact: Ared Cezariliyan, Rm. 124, Hazards Bldg., NBS, Washington, D.C. 20234 (301-921-3685).

May 11-12—Los Angeles — Marketing Chemical Coatings for Profit Seminar. Sponsor: Nat'l Paint & Coatings Assn. Contact: Georgene Savickas, NPCA, 1500 Rhode Island Ave. NW., Washington, D.C. 20005 (202-462-6272).

Foreign Reports Assist Firms' Marketing Plans

COMMERCE DEPARTMENT CALLING NEW ATTENTION TO AVAILABLE SUMMARIES, SURVEYS, SPOT NEWS

The Commerce Department is aiming some practical assistance at the international marketing manager who must fit bits and pieces of new data, new trends, or new directions to trade flows into his company's export action programs.

It is calling renewed attention to its Foreign Market Reports Service, a running data file originating mainly with U.S. Foreign Service officers at their stations in more than 100 countries, and ranging from terse accounts of spot developments affecting trade to timely surveys on industrial, commodity, commercial or economic conditions.

To filter out of this heavy flow of information—about 100 reports come into Washington each month—the items that directly interest the individual subscribing firms, the Department has set up two indexing systems. Under an automated program, reports on pre-selected subjects are sent by computer to addressees as soon as they are received. A second system supplies a printed Index to customers, who choose from it the items they decide are useful to them.

A glance through a recent Index shows the variety of reports available:

- A "foreign market survey," focusing on air and water pollution control equipment in Germany and prepared there for the Commerce Department, is an in-depth study providing information on the size of the German market for pollution control equipment, forecasts for both domestic sales and imports, and a picture of the U.S. share of the market.
- An "industrial outlook report" on minerals in Japan by the Embassy in Tokyo and sent to Commerce by airgram, reports on mineral production, changes in U.S. contract practices, and new developments in the aluminum and nickel industries.
- A "market research summary" offers U.S. businessmen considering participation in an exhibition of electronics industry production and test equipment at the U.S. Trade Center, Mexico City, next September, concise market data and product end-user analysis.
- A "participants list" names the exhibitors who took part in a recent printing and graphic arts equipment exhibition at the U.S. Trade Center in Tokyo. The title of each firm, its exhibit items and whether it is "new or old to market" is indicated.

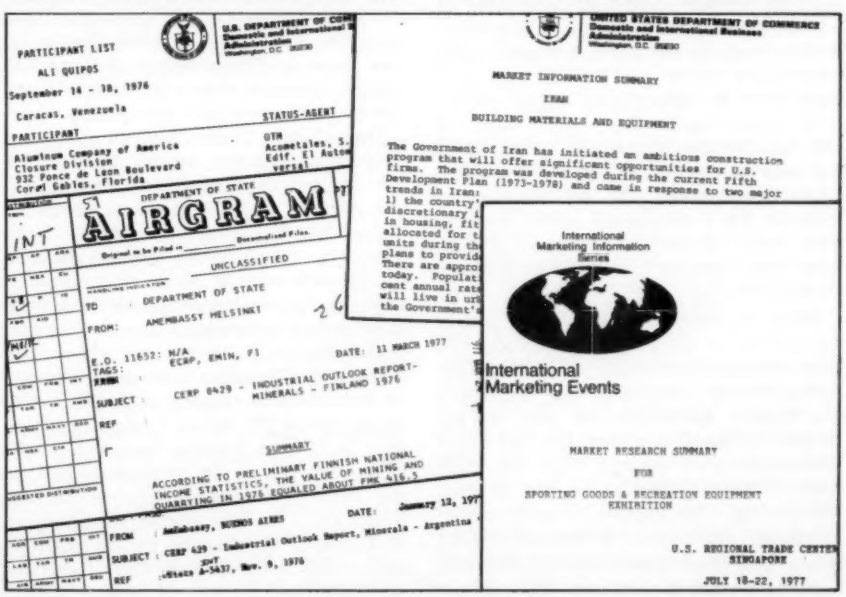
Among other recent reports were an airgram from Antwerp on production equipment for chemical and petrochemical industries, a market survey for computers and peripheral equipment in Germany, and an airgram on the South African automotive industry.

A subscriber taking the automated option in using the service, say a company interested in industrial process control equipment, which carries the Standard Industrial Classification code number SIC-3823, marks its application with that code number, and receives all reports concerning such equipment. Another company interested generally in conditions in Japan marks that name on its application and gets all reports about Japan. A company that wants to choose from the entire supply of available reports examines, as mentioned above, the monthly Index for useful reports.

Companies using the Foreign Market Reports Service find it supplementing other widely-used foreign marketing publications offered by the Commerce Department—the Foreign Economic Trends series, the Overseas Business Report series, Global Market Surveys, and Trade Lists.

Commerce's National Technical Information Service, under an arrangement with the Bureau of International Commerce, handles the "customized" FMR service.

During recent years, as many as 40,000 requests for reports have been filled by the FMR Service. For additional information, or to subscribe, write NTIS, Box 1553, Springfield, Virginia 22151, any Commerce District Office, or BIC's Export Information Division, Room 1063, U.S. Department of Commerce, Washington, D.C. 20230, phone 202-377-2996.


PARTICIPANT LIST

ALI QUIPOS

September 14 - 18, 1976

Caracas, Venezuela

PARTICIPANT — STATUS-AGENT

Aluminum Company of America
Closure Division
932 Ponce de Leon Boulevard
Coral Gables, Florida

DEPARTMENT OF STATE
AIRGRAM

UNCLASSIFIED

TO: DEPARTMENT OF STATE

FROM: AMEMBASSY HELSINKI

E.O. 11652: N/A
TAGS:
ECAP, EMIN, FI

DATE: 11 MARCH 1977

SUBJECT: CERP 0429 - INDUSTRIAL OUTLOOK REPORT-MINERALS - FINLAND 1976

REF

SUMMARY

ACCORDING TO PRELIMINARY FINNISH NATIONAL INCOME STATISTICS, THE VALUE OF MINING AND QUARRYING IN 1975 EQUALED ABOUT FMK 416.5

FROM: Embassy, BUENOS AIRES

DATE: January 12, 197

SUBJECT: CERP 429 - Industrial Outlook Report, Minerals - Argentina

REF: State A-5437, Nov. 9, 1976

MARKET INFORMATION SUMMARY

IRAN

BUILDING MATERIALS AND EQUIPMENT

The Government of Iran has initiated an ambitious construction program that will offer significant opportunities for U.S. firms. The program was developed during the current Fifth Development Plan (1973-1978) and came in response to two major trends in Iran:

International Marketing Information Series

International Marketing Events

MARKET RESEARCH SUMMARY

FOR

SPORTING GOODS & RECREATION EQUIPMENT EXHIBITION

U.S. REGIONAL TRADE CENTER SINGAPORE

JULY 18-22, 1977

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Bureau's Office of International Trade Policy.

THE PRESIDENT

Footwear Decision Released: The Presidential decision on import relief for the **non-rubber footwear** industry was released by the White House on April 1. The President rejected, as too restrictive, the tariff rate quota recommended by the International Trade Commission following its finding that increased imports were causing serious injury to the domestic footwear industry. Instead, he instructed Special Trade Representative Strauss to negotiate orderly marketing agreements with appropriate suppliers. He also directed an expanded and more effective program of adjustment assistance for the footwear industry, including recommendations to Congress for new legislation as necessary. Under provisions of Title II of the Trade Act, the Special Trade Representative has 90 days in which to negotiate needed agreements and is beginning talks with the Republic of China (Taiwan) and the Republic of Korea. (See also story in April 11 issue, page 22.)

CONGRESS

Bills Passed — House: The following bills were passed by the House: H.R. 422, to provide duty-free treatment of any **aircraft engine** used as a temporary replacement for an aircraft engine being overhauled within the U.S. if duty was paid on such replacement engine during a previous importation; H.R. 1401, to provide duty-free treatment for 33 **carillon bells** for Smith College, Northampton, Mass.; and H.R. 3259, to continue to suspend, for a temporary period, the import duty on certain **horses.** The bills have been referred to the Senate Finance Committee.

Bills Reported — Senate: The Senate Committee on Banking, Housing and Urban Affairs ordered reported with amendments S. 69, amending and extending the Export Administration Act. As approved by the Committee, the bill would extend the Act through Sept. 30, 1979, and eliminate Title III of the original bill dealing with exports of nuclear material and technology. Provisions dealing with the Arab boycott are also included.

Bills Reported — House: The House Committee on International Relations ordered favorably reported to the House H.R. 5840, Export Administration Amendments of 1977. The bill, similar to S.69, would amend the Export Administration Act to extend the authorities and improve the administration of export controls, and to strengthen the anti-boycott provision. Title II of both H.R. 5840 and S.69 prohibit compliance with foreign boycotts except in certain circumstances enumerated in the bills.

House Hearings: In March, the House Ways and Means Subcommittee on Trade began a series of hearings to examine the implementation of the Trade Act of 1974. Initiating the series were hearings on March 24 regarding the exercise by the U.S. International Trade Commission (ITC) of its expanded responsibilities under provisions of the Trade Act. During the hearing, the Subcommittee simultaneously considered the ITC's appropriation authorization. The six ITC Commissioners and the ITC General Counsel testified.

Next, on March 25 the Subcommittee heard testimony from the ITC, Census and Customs on the status of work being done by the agencies to meet the requirement of section 608 of the Trade Act concerning data comparability of imports, exports, and production.

Then, on March 31 and April 1, the Subcommittee held hearings on H.R. 1593, 2484, 2523, 3666 and 4460, concerning trade adjustment assistance programs. The hearings covered the operation and effectiveness of the adjustment assistance programs for workers, firms and communities established under Title II of the Trade Act of 1974. Testimony was given by Congressional, private and public witnesses. The Administration will testify on the program later.

The House Committee on Banking, Finance and Urban Affairs' Subcommittee on International Trade, Investment and Monetary Policy held hearings on Export-Import Bank legislation. Testimony was heard from representatives of the Departments of State and Treasury, and the Export-Import Bank and from other public witnesses.

The House Committee on Commerce, Science and Transportation held hearings on legislation to create mandatory safety requirements for all oil tankers that engage in U.S. or foreign commerce. Testimony was given by representatives of the Departments of Transportation and State, Elliot L. Richardson, Ambassador-At-Large to the Law of the Sea Conference, and John Nachtsheim, Assistant Administrator for the Maritime Administration.

In addition, hearings on trade-related matters were held by three other Subcommittees of the House. The Subcommittee on Merchant Marine of the Committee on Merchant Marine and Fisheries held hearings on H.R. 1037 and related bills, to require that a percentage of U.S. oil imports be carried on United States flag vessels. The House Committee on Government Operations' Subcommittee on Commerce, Consumer and Monetary Affairs held hearings on the export promotion policies and programs of the Departments of Commerce and State. Finally, the Mines and Mining Subcommittee of the Committee on Interior and Insular Affairs held hearings on H.R. 3350 and H.R. 3652, the Deep Seabed Hard Minerals Act.

New Legislation: In the first session of the 95th Congress, 200 trade and related bills have been introduced. Those not previously reported in this column include: H.R. 4922 and H.R. 5624, to ensure the development of U.S. ocean mining capabilities and to support the continuation of the **Law of the Sea Conference** negotiations; H.R. 4925, regarding inspection and marking of **imported meat** and **meat food products** and inspection of imported **dairy products;** H.R. 5044, to suspend until Jan. 30, 1980, a portion of the duties on **strontium nitrate;** H.R. 5052, to provide for the temporary suspension of duty on the importation of **color couplers** and **color intermediates** used in the manufacture of photographic sensitized material; H.R. 5110, to impose quantitative limitations on the importation of **shrimp** into the U.S. during calendar year 1977 and 1978, and to impose a duty on imported shrimp; H.R. 5144, to repeal **tariff item 807.00;** H.R. 5146, to provide duty-free entry to **competition bobsleds and luges.**

Also, H.R. 5148 and H.R. 5363, to amend the **worker adjustment assistance** provisions of the Trade Act of 1974 in order to provide that workers may be covered under certification of eligibility to apply for such assistance if they are totally or partially separated from adversely affected employment within two years before the date of the petition for such certification; H.R. 5176, to lower the duty on **levulose** until the close of Dec. 31, 1980; H.R. 5203, to amend the Tariff Schedules of the U.S. in order to suspend, until the close of Dec. 31, 1978, the duty on certain **field glasses, opera glasses, binoculars** and **other telescopes;** H.R. 5231, to provide duty-free entry of **chlorendic acid;** H.R. 5233, to increase, for a five-year period, the duty on **certain hand tools;** H.R. 5263, to suspend until the close of June 30, 1978, the duty on certain **bicycle parts;** H.R. 5265, to provide for the temporary suspension of duty on the importation of **fluorspar;** H.R. 5270, to reduce the duty on **aspen**

wood for wood particle board; H.R. 5285, to amend the Tariff Schedules of the U.S. with respect to the tariff treatment accorded to **sheets manufactured from acrylic resin materials;** H.R. 5286, to amend the Tariff Schedules of the U.S. with respect to the tariff treatment accorded to **acetone;** H.R. 5322, to continue, for a temporary period, the existing suspension of duty on certain **istle.**

Also, H.R. 5551, to suspend for a three-year period the duty on **2-Methyl, 4-Chlorophenol;** H.R. 5643, to implement the United Nations Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of **Cultural Property;** H.R. 5714, to amend the **Export-Import Bank Act of 1945** by eliminating the Presidential determination requirement in connection with trade with the People's Republic of China; H.R. 5715, to amend the **Trade Act of 1974** to permit the People's Republic of China to participate in programs of the United States which extend credits, credit guarantees or investment guarantees; H.R. 5840, to amend the **Export Administration Act of 1969** in order to extend the authorities of that act and improve the administration of export controls under that act, and to strengthen the antiboycott provisions of that act.

Also, H.R. 5858, to amend the Tariff Schedules of the U.S. to permit the free entry of **Canadian petroleum and crude shale oil,** provided that an equivalent amount of the same kind and quality of domestic or duty-paid foreign crude petroleum and crude shale oil has been exported to Canada; H.R. 6146, to amend the Marine Mammal Protection Act of 1972 to allow the commercial **tuna fishing** fleet to continue operations while exercising due care to reduce incidental porpoise mortality to insignificant levels; H.J. Res. 326, calling for a wildlife preserve for **humpback whales** in the West Indies; S. 1017, to extend the **Export-Import Bank Act of 1945,** as amended and S. 1239, to amend the Tariff Schedules of the U.S. to increase from $100 to $250 the value of articles which may be **imported duty-free** by or for the account of any person arriving in the United States who is a returning resident.

COMMERCE

Report on Shoe Industry: The Department of Commerce has reported to the President that **shoe** manufacturers may become eligible to apply for trade adjustment assistance under provisions of Title II of the Trade Act of 1974. The report noted that while 13 firms are receiving adjustment assistance and an additional 14 firms have been certified eligible to apply for such relief, the Department was unable to determine how many are likely to be certified eligible. The report was issued pursuant to the Trade Act requirement that the Department conduct a study of adjustment assistance in relation to any industry subject to an "escape clause" investigation under section 201 of the Trade Act.

- **President takes action in footwear case**
- **U.S. Customs Court overturns Treasury countervailing duty decision in Zenith case**
- **ITC initiates its 24th "escape clause" investigation—cast-iron stoves**

TREASURY

Antidumping Cases: The Department has announced final affirmative findings of sales at less than fair value, within the meaning of the antidumping law, following investigations in two cases. The products involved are **metal-walled above-ground swimming pools** and **round head steel drum plugs,** both from Japan. The cases have been referred to the U.S. International Trade Commission for an investigation into whether such sales have caused, or are causing injury to a domestic U.S. industry. If injury is found, antidumping duties will be assessed on the subject imports.

In other antidumping action, Treasury has instituted three new investigations and has reopened a previously discontinued one. The new investigations concern alleged sales at less-than-fair value of **polyvinyl chloride (PVC) sheet and film** from the Republic of China and **carbon steel plate and impression fabric of manmade fiber** (typewriter and computer ribbon) from Japan. The latter case has been referred to the ITC for a preliminary inquiry into injury, provided for by section 201(c)(2) of the Antidumping Act of 1921 (See International Trade Commission section, below).

The reopened investigation concerns **welded stainless steel pipe and tubing** from Japan. The previous discontinuance, issued in November, 1972, was based on minimal dumping margins and on price assurances from Japanese exporters. The current investigation will be to determine whether there has been a violation of those price assurances.

Countervailing Duty Cases: Treasury has announced its final determination that bounties or grants, within the meaning of the countervailing duty law, are being paid on imports of **cotton yarn** from Brazil. Countervailing duties, preliminarily set at 21.4 percent, will therefore be assessed on such imports.

In addition, two new investigations have been initiated under this statute. The subject products are **leather wearing apparel** from the Republic of China and **butter cookies** from Denmark.

LABOR

Adjustment Assistance Certification: The Labor Department, having found that workers at certain firms have been or may become unemployed as a result of increased imports, has certified workers at those firms as eligible to apply for adjustment assistance. Adjustment assistance, under the provisions of the Trade Act of 1974, may include cash trade readjustment allowances, training, testing, counseling, job placement, job search grants and relocation allowances.

The workers certified (numbers where available are approximate) are or have been employees of the following firms: Gutman-Kesslen Shoes, Inc., Manchester, N.H. **(women's shoes)** 285; Diebold, Inc., Canton, Ohio **(safety deposit boxes, vault doors, bank equipment)** 240; K. P. Hydraulics Co., Hudson, Wis. **(hydraulic bottle jacks)** 85; Terrace Footwear, Inc., Norwalk, Conn. **(women's casual footwear)** 45; U.S. Steel Corp., Baytown, Tex. **(carbon plate)** 230; National Tanning and Trading Corp., Peabody, Mass. **(tanned and finished hides)** 200; Jonell Shoe, Inc., Lawrence, Mass. **(women's casual canvas footwear)** 180; Elfskin Corp., Worcester, Mass. **(coated fabric)** 20; Mara Coats, Inc., Wantagh, N.Y. **(women's rainwear)** 30; Bonnie Fashions Co., Broomall, Pa. **(women's sportswear)** 15.

Also, Rubber Corp. of Arkansas, DeQueen, Ark. **(rubber/canvas footwear)** 225; Electro Motive Corp., Florence, S.C. **(capacitors)** 170; Berman Mfg. Co., Inc., South River, N.J. **(women's slacks, jackets, vests, skirts** and **blouses)** 17; Fairchild Camera and Instrument Corp., South Portland, Ore. **(digital integrated circuits)** 700; Crescendoe Gloves, Inc., Johnstown, N.Y. and St. Johnsbury, Vt. **(fabric dress gloves)** 25; Ardmore Fashions, Inc., Chester, Pa. **(women's dresses);** Park Avenue Industries, Inc., Pakmi Processing, Inc. and Better Fashions, Inc., Brooklyn **(women's sweaters** and **knit tops)** 75; and Bloomberg Leather Goods, Menomonee Falls, Wis. **(men's leather** and **leather/synthetic belts).**

Denials: The Department denied petitions for trade adjustment assistance for workers of the following companies: General Last Mfg. Co., St. Louis **(shoe lasts)** 40; Sunshine Kiddie Knitwear Co., Inc., New York **(children's knit playwear)** 30; McGee-Kenyon, Inc., New York **(shoe patterns);** Linett Tailleurs, Inc., New York **(men's suits** and **sport coats);** Shenango, Inc., Buffalo **(cast iron molds);** Bali Co., Inc., Jersey City **(bras-**

sieres); South End Transportation, Co., Trout Creek, Mich. (**transportation services**); Keystone Steel and Wire Div. of Keystone Consolidated Industries, Inc., Peoria, Ill. (**steel and wire products**); Eastern Plastics of Maine, Inc., York Heel of Maine, Inc. and National Heel of Massachusetts, Sanford, Me. (**shoe heels** and **soles**); Elfskin Corp., Worcester, Mass. (**cork shoe bottoms**); United States Metals Refining Co., Carteret, N.J. (**refined copper**) 1000; William Powell Mfg. Co., Cincinnati (**industrial valves**) 555.

Also, Worcester Controls Corp., West Boyleston, Mass. (**ball valves** and **actuators**) 190; Ladish Co., Kentucky Div., Cynthiana, Ky. (**valves** and **fittings**) 100; Airway Mfg. Co., Olivet, Mich. (**hydraulic fittings**) 35; Royal Typewriter Co., Mfg. and Eng. Div., Hartford, Conn. (**photocopy equipment** and **text editing typewriter systems**) 30; Electralloy Corp., Oil City, Pa. (**stainless steel ingots**); Jeff Richard, Inc., Hatboro, Pa., Philadelphia and New York (**girls' slacks, coveralls, jumpers** and **skirts**); National Supply Co., Gainesville, Tex. (**steel triplex pumps, slush pumps, converters** and **cranes**); UAW Local 12, Kenosha, Wis. (**union administrative work**); ASARCO, Inc., Perth Amboy, N.J. (**refined copper**) 530; Winer Mfg. Co., Inc., Hammond, Ind. (**leather coats, leather** and **cloth outercoats**) 140; Cabot Corp., Stellite Div., Kokomo, Ind. (**super alloys**).

Also, Armco Steel Corp., Zanesville, Ohio (**silicon electrical steel, sheet** and **strip**) 130; Dixon Valve and Coupling Co., Chestertown, Md. (**nipples, clamps** and **valves**); Auszmann, Inc., Bridgeport and Pottstown, Pa. (**women's dresses**) 90; M. Bell Co., Philadelphia, Pa. (**misses'** and **juniors' dresses**) 10; Sarco Co., Allentown, Pa. (**steam** and **hot water controls**) 12; Del Lee Dress Co., Philadelphia, Pa. (**misses' dresses**) 12; Zurn Industries, Inc., Hydromechanics Div., Erie, Pa. (**plumbing products**); Iron Wood Products Corp., Bessemer, Mich. (**prefinished paneling**) 75; Jenkins Brothers, Bridgeport and Fairfield, Conn. (**valves**) 50; Joseph P. Conroy, Inc., Johnstown, N.Y. (**dress gloves, leather ski gloves** and **mittens**) 5; Berger Industries, Inc., Metuchen, N.J. (**welded steel tubing**).

Also, Koppers Co., Inc., Organic Materials Div., Woodward, Ala. (**coke**); Empire Coke Co., Holt, Ala. (**coke**); Hansen Seaway Service Ltd., Milwaukee (**loading, unloading** and **storage of goods**); Covington Brothers Wholesale Groceries, Mayfield, Ky. (**wholesale grocery activities**); Kaiser Steel Corp., Light Steel Products Plant, Fontana, Calif. (**light steel products**); Midvale-Heppenstall Corp., Philadelphia, Pa. (**high grade alloy steel ingots, forgings,** and **forged rolls**) 350; National Forge Co., Erie, Pa., (**steel forgings**); Enflo Corp., Maple Shade, N.J. (**fluorocarbon (TFE) basic shapes**) 40; Canteen Corp., Edison, N.J. (**food services**); Standard Alliance Industries, Inc., Alliance, Ohio (**steel forgings**); and Sperry Vickers Corp., Bensenville, Ill. (**hydraulic power units**).

Revisions: Workers and former workers producing **metal fasteners** at the Russell, Burdsall, and Ward, Inc. plant in Rock Falls, Ill., having previously been found ineligible to apply for adjustment assistance, have now been certified eligible. Conversely, the certification issued in 1975 for workers engaged in the production of **thermistors** at the Keystone Carbon Co. plant in St. Mary's, Pa., has been revised to state that employees separated from employment on or after April 15, 1977 are denied eligibility to apply for adjustment assistance.

Investigations: The Department has recently initiated a series of investigations to determine whether workers at approximately 240 plants are eligible to apply for adjustment assistance. Industries substantially involved include **clothing, shoes, sugar** and **shrimp.**

Footwear Report: A new Labor Department study indicates that, in the last two years, more than 16,000 workers in the **nonrubber footwear** industry have been certified as eligible to apply for trade adjustment assistance. The study was conducted pursuant to section 224 of the Trade Act of 1974, to determine the number of workers who have been or are likely to be certified as eligible for, and aided by, adjustment assistance in the industry, following the International Trade Commission's initiation of a section 201 "escape clause" import relief investigation.

AVENUES FOR IMPORT RELIEF

News accounts currently feature actions that stem from efforts by U.S. industries to counter effects of increasing competition of imported products in domestic markets. In the interest of clarifying these actions and distinguishing among them, Commerce's Office of International Trade Policy has provided the following summary of import relief measures provided under U.S. trade laws.

SECTION 201 "ESCAPE CLAUSE" provisions, Trade Act of 1974. **Initiation:** through filing of a petition with the International Trade Commission (ITC). **Criterion for eligibility:** evidence of imports in such increased quantities as to be a substantial cause of serious injury to the domestic industry. **Remedy:** the President may increase or impose duties, quotas or tariff rate quotas; negotiate orderly marketing agreements; order expedited domestic adjustment assistance.

ANTIDUMPING ACT OF 1921. Initiation: through filing of a petition with the Treasury Department. **Criterion for eligibility:** sales of imports below price in home market of foreign producers, causing or likely to cause injury to or preventing establishment of a domestic industry. **Remedy:** imposition of additional import duties equal to amount of the dumping margin.

COUNTERVAILING DUTY LAW, Section 303, Tariff Act of 1930. **Initiation:** through filing of a petition with the Treasury Department. **Criterion for eligibility:** payment or bestowal of a bounty or grant by a foreign government upon goods imported into the U.S. **Remedy:** imposition of additional duties in the net amount of the subsidy.

UNFAIR IMPORT PRACTICES, Section 337, Tariff Act of 1930. **Initiation:** through filing of a petition with the ITC. **Criterion for eligibility:** unfair methods of competition or unfair acts in importation or sale of imports with likelihood to cause substantial injury to or prevent establishment of a domestic industry, or restraining or monopolizing U.S. trade and commerce. **Remedy:** issuance by ITC of cease-and-desist order or embargo on importation of subject products.

In a current example, the U.S. television industry has sought relief under all of these provisions, to the following effect at this time:

"ESCAPE CLAUSE." There have been affirmative injury and causation findings by the ITC, followed by ITC recommendation of increased tariffs. The President has until May 21 to decide whether to accept the ITC recommendation. Approximately $8.5 million in trade is involved.

ANTIDUMPING DUTY LAW. There has been an affirmative finding of dumping of certain Japanese imports; dumping duties are being imposed.

COUNTERVAILING DUTY LAW. The U.S. Customs Court has overturned a Treasury Department finding that rebates of a Japanese commodity tax did not constitute a subsidy; appraisement is being withheld, pending outcome of the appeals process. Approximately $1.5 billion in trade is involved.

UNFAIR IMPORT PRACTICES. An ITC investigation is now in progress.

INTERNATIONAL TRADE COMMISSION

Section 201—Escape Clause Cases: The International Trade Commission has instituted an investigation under section 201(b) of the Trade Act of 1974 (the "escape clause") to determine whether **cast-iron stoves and parts and fireplace grates** are being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry. A public hearing in connection with this 24th investigation under section 201 will be held May 19 in the Hearing Room of the ITC, 701 E Street, NW., Washington, D.C. and requests for appearances should be filed with the Secretary at the ITC's Washington office by noon, May 16. The Commission intends to expedite the investigation and report to the President by July 11, if possible.

Also, in other escape clause action, hearings in connection with the **fresh cut flowers** case previously scheduled to begin May 3 in Miami, were held instead on April 14.

Antidumping Cases: Following a Treasury Department finding that imported **round head steel drum plugs** from Japan are being or are likely to be sold at less than fair value, the ITC instituted an investigation to determine whether such sales are injuring, or preventing establishment of, a U.S. industry. A hearing will be held, beginning May 3 at 10 a.m. in the Commission's Washington hearing room. Requests to appear must be filed, in writing, with the ITC Secretary by noon, April 28.

In other antidumping action, the ITC has initiated inquiry, pursuant to section 201(c) (2) of the Antidumping Act of 1921, to determine whether there is no reasonable indication that a U.S. industry is being or is likely to be injured by reason of importation of **impression fabric of manmade fiber** from Japan. The law allows for such an inquiry to be conducted upon request of the Secretary of the Treasury whenever he concludes that there is substantial doubt whether the imports in question are causing injury.

Section 337—Unfair Trade Practices: The Commission has announced termination of two investigations of alleged unfair trade practices which were being conducted under section 337 of the Tariff Act of 1930. The terminated cases involve **knitting machines and throat plates** and **chicory root.**

New Commission Rule on Notification to Other Federal Agencies: The Commission has adopted a rule establishing a standard procedure to be followed in its determinations of whether to notify another Federal agency of a matter that may fall within the jurisdiction of that agency. Prior to the rule, such determinations, required in certain escape clause and unfair trade practice cases, were made on a case-by-case basis. The ITC made clear, upon announcement of the new rule, its continued position that notification of subject matter applying to another agency does not require cessation of Commission activity in an investigation. This position was reflected in the Commission's handling of the section 337 investigation of alleged unfair practices in the importation of **televisions.**

Report on Brooms: The Commission has issued its 10th annual report to the President on U.S. consumption of **brooms** made of broom corn, including information on other brooms competitive with those made of broom corn. The annual reports assist the President in administering a tariff-rate quota system on brooms provided for in the Tariff Schedules of the United States.

U.S. CUSTOMS COURT

Zenith Radio Corp. v. United States Decided: The U.S. Customs Court has overturned the Treasury Department's negative finding on a Zenith Radio Corporation petition alleging that rebates, on exports of **certain consumer electronic products,** of a Japanese commodity tax, constitute bounties or grants within the meaning of the U.S. countervailing duty law. During appellate review, Treasury will suspend liquidation of duties on U.S. imports of the subject products, which total approximately $1.5 billion annually.

FOREIGN ACTIONS

Foreign Antidumping Actions: Two cases involving products originating in the United States have been referred to the Canadian Anti-dumping Tribunal for determinations of injury, following findings of sales at less than fair value under Canada's Antidumping Act. The products involved are **acrylic fiber** and **disposable electrodes.**

In addition, a new Canadian investigation has been initiated to determine whether imports of **certain nylon continuous filament textured yarn,** some of which originates in the United States, is being sold at less than fair value.

Safeguards: Following a report of the Canadian Textile and Clothing Board that imports of **sheets and pillow cases,** if not restrained, could adversely affect the Canadian domestic industry, the Government of Canada has announced certain measures to be taken to control imports. Bilateral export restraint arrangements will be sought with Hong Kong, the People's Republic of China, Poland and Taiwan, and surveillance will be maintained on importation from India, Poland and Romania.

Also, despite the Textile and Clothing Board's recommendation that imports of **warp knit fabrics** be restricted, the Canadian Government has decided to defer any restrictions, but to continue monitoring, and requiring permits for, such imports.

SEIZURE, SENTENCE SHOW U.S. DETERMINATION TO HALT ILLEGAL EXPORTS

Two recent enforcement actions relating to illegal export of strategic equipment are being called to the attention of the U.S. trading community by the Commerce Department.

One of the actions was a seizure of goods at the U.S.-Canadian border, the other a severe sentence handed down in California against violators of the U.S. export regulations. In both instances, the equipment involved was for the production and testing of semiconductors and integrated circuits.

Authorities in the Department's Office of Export Administration said that an increased awareness of U.S. Government determination to take such drastic measures could help counteract apparent widespread efforts to procure for unlawful delivery to East European countries, or other proscribed destinations, strategic instruments and equipment, particularly in the electronic field.

The border seizure occurred March 17 at Champlain, N.Y. U.S. Customs Service agents acted at the request of agents of the Office of Export Administration. The shipment, which had originated in Boston that day, consisted of more than $150,000 worth of equipment for the manufacture of integrated circuits. The purchaser was Peter Virag, president of De Vimy Test Lab, Ltd., Montreal.

The Commerce Department said Virag had signed a Shipper's Export Declaration listing Canada as the end-use destination. However, the Department received information that the equipment was scheduled for shipment onward to Eastern Europe. The equipment would not normally be licensed for shipment to this area.

On March 11, a Federal Court in California sentenced two corporate executives to 18 months in prison, fined each $10,000, and fined their firm $10,000 in a case that began with allegations of unauthorized export of strategically-rated semiconductor manufacturing equipment to the Soviet Union through a route that included fictitious firms in four countries. This sentence is currently being appealed.

Those receiving the sentence were Gerald R. Starek and Carl E. Storey, president and vice-president for sales, respectively, of I. I. Industries, Inc., Sunnyvale, Calif., and the firm itself. Charges are still pending against two others involved in the case. However, they are foreign nationals not now in the U.S.

Mexican Market For Vehicle Repair Equipment Improves, Despite Higher Peso Cost

Recent depreciation of the Mexican peso vis-a-vis the U.S. dollar and most of the world's currencies has had the effect of sharply increasing the peso cost of motor vehicles and stationary and marine motors. Exhibitors at a Mexico City U.S. Trade Center show found that many Mexicans, thus priced out of the new-equipment market, are eager to keep their present vehicles in good working order and operating longer—a situation that has improved the market for repair and maintenance equipment.

Focus of the U.S. show was just such equipment. Although the cost of these items has increased even more than that of vehicles and motors themselves, Mexican service firms view buying them as an investment in better and more efficient service that points to a larger volume of customers. The 21 U.S. exhibitors, almost uniformly optimistic about the market, concluded sales of $128,628 during the show and project 12-month orders at $1.6 million. Best prospects are for products of sufficient sophistication that they would not be manufactured in Mexico. Items with broad applicability, such as tube benders, were highly popular. Electronic test equipment, dynamometers, engine rebuilders, wheel balancers and aligners, and thread repair kits proved to be of great interest. In areas developed by U.S. industry, such as repair and test equipment for automatic transmission and air conditioners, interest is gaining—as more automotive units with those options are now being sold in Mexico. Increased domestic manufacturing has lessened opportunities for importing certain items, such as clutch parts, ignition parts, fuel pumps, tools.

Although devaluation is discouraging imports in general, imports from the United States retain the advantage of geographical proximity. Most exhibitors felt that their products were competitive in price, compared with those of other manufacturers, but that features such as "ease of use and trouble-free maintenance" were more important in making sales. U.S. products are seen as technically advanced, durable, and economical to operate.

Better financing terms—often available from European and Japanese suppliers—may prove to be crucial selling points in Mexico's current tight situation.

First International Fair At Khartoum Invites Firms

Sudan's six-year development program beginning in July and an expected infusion of capital from Arab League nations can add impetus to U.S. firms' participation in Sudanexpo, the first International Fair of Khartoum, to be held next Jan. 19-27.

Exhibitors are especially sought in: agricultural machinery, building materials and prefabricated housing, construction machinery, electrical equipment, food processing machinery, office equipment, textile machinery, transportation equipment and vehicles, woodworking and timber machinery, and household appliances.

For more details write Country Marketing Manager, African Area, U.S. Dept. of Commerce, Washington, D.C. 20230, or call 202-377-3865.

Southeast Asian Industrial Pick-Up Expands Electric Energy Equipment Market

A pick-up in industrial activity in Southeast Asia is expanding the area's market for electric energy systems and equipment—a development that was underscored at a recent U.S. Trade Center show in Singapore. The 28 exhibitors of such equipment, as a result of their participation, are projecting sales of some $21.2 million, three times higher than for any previous Singapore Center event.

"TRY IT—YOU'LL LIKE IT"—*So says M. J. McBride, representative of Thomas & Betts International Inc., Elizabeth, N.J., at U.S. Trade Center show in Singapore, to a potential customer.*

Members of the Association of Southeast Asian Nations are making concerted efforts to attract new investment to their manufacturing sectors in addition to pooling their resources for regional industrial projects. A majority of the foreign visitors at the exhibition came from Malaysia and Indonesia, two of the fastest developing Southeast Asian countries, each of which are expected to consume as much as $170 million worth of electric power generation equipment by the end of the decade.

American products and processes are known for their quality and reliability. The Trade Center show enabled end-users to see for themselves—many for the first time—the systems that U.S. suppliers can offer for the further development of the area's economic infrastructures.

Algiers Fair, September

U.S. business executives considering export opportunities are invited to attend the 14th International Algiers Fair, a general industrial exhibition, to be held Sept. 21-Oct. 7. Application deadline is May 1. Details are available from: SONAFEX, B.P. 656, Alger Gare, Algeria (phone 76-31-001; telex, 52828); or from Commerce Action Group for the Near East, Room 3203, U.S. Department of Commerce, Washington, D.C. 20230; phone 202-377-5737.

Germans Like U.S. Design In Housewares, Exhibitors At Cologne Fair Report

A shift in interest from predominantly functional to attractively designed products was noted by U.S. exhibitors at the 1977 International Housewares Fair in Cologne. And as U.S. goods are clearly advanced in design, they found wide acceptance. The 28 exhibitors sold about $265,000 worth off the floor, and expect orders in the next 12 months to total some $9.6 million.

Products exhibited included general household articles, electrical appliances, bake and cookware, kitchenware and utensils, decoration and gift items. Adaptations of the use of computer technology in some appliances—for example, push-button programming—attracted keen interest.

The German market for household consumer goods has been dominated by local products. Most of exhibitors at the U.S. pavilion confirmed, however, that their products fully met technical standards required in the German market, and that U.S. products are price competitive. Given prevailing economic trends, expansion of the German housewares and related products market—valued at almost $4 billion annually—is expected to increase 4 to 5 percent this year and next.

SHIPBUILDING, HARBOR DEVELOPMENT IN TAIWAN SIGNALS EQUIPMENT NEEDS

The Republic of China (Taiwan) is moving rapidly to become self-sufficient in shipping and is seeking to improve its capacity for the handling of its booming trade. During Maritime USA '77, a recent exhibition of dockside and shipboard equipment at the U.S. Trade Center in Taipei, the 21 participants reported immediate sales of $342,480 and 12-month projected sales of more than $13 million, thereby addressing the Republic's needs for sophisticated maritime equipment.

The American manufacturers displayed a wide variety of machinery and equipment, including airless spray systems; cutting, welding and threading equipment; pipe and tube fitting, hydraulic, electric, pneumatic and hand tools; abrasive equipment; dredging systems; barges and tugboats; cranes and lifting equipment; security, safety and surveillance systems; electronic scales; marine communications and navigation equipment; diesel engines; and propulsion control systems.

Completion of the China Shipbuilding Corp.'s Kaohsiung Shipyard, one of the largest in the world, on June 1 of last year and of the first phase of the Taichung Harbor Construction Project at the end of October, and other ongoing improvement projects for existing ports in the Keelung and Kaohsiung areas indicate that the country will be able to meet its own rapidly growing cargo handling and transport needs, and also help satisfy the world demand for shipping and related services that is foreseen in the next decade.

Four of the five exhibitors who were seeking agents/distributors at Maritime USA '77 signed sales representation agreements, and an additional two agreements are expected to be concluded soon.

Jerome M. Kleifgan, international marketing manager, Venus Scientific, Inc., Farmingdale, N.Y., found the Trade Center's provision for additional demonstration area outside of the designated exhibition space extremely valuable in showing potential customers the full capability of the equipment on display. "Several promising sales leads were obtained as a direct result of this facility," he commented. During the event, Venus Scientific sold more than $100,000 of its low-light level television security and surveillance systems.

Marine Fair, Genoa, This Fall

An international fair for exhibiting the full range of marine technologies—from traditional tasks of ship construction to the new concerns of desalination and prevention of sea pollution—will be held in Genoa, Sept. 17-23. The fair, TECNOMAR 77, will be sponsored jointly by COMIS, the Organizational Center for Specialized International Exhibitions, and the International Fair of Genoa. For further information, write: COMIS, Via Boccaccio 7, I-20123 Milan, Italy.

Third U.S. Computer Show At Paris Trade Center Reflects Brisk Market

More than 2300 visitors filled the U.S. Trade Center, Paris, last month for an exhibition of computers and peripheral equipment, generating $48.4 million in projected sales over the next year for the 43 show participants representing 75 companies. Composed entirely of French agents, distributors and subsidiaries of U.S. firms, Printemps Informatqiue 77 resulted in the highest projected sales ever and best attendance since the opening exhibition of the Trade Center in 1969.

The first Printemps Informatique, in March 1975, proved to be so successful that it has been repeated each spring, making 1977 the third annual presentation of this show. Participation interest is already keen for Printemps Informatique 78.

The repeated unqualified success of this show reflects the continuing vital market for U.S. computers and peripheral equipment in France. U.S. firms are expected to supply 50-55 percent of market expansion through 1980.

Exceptional pre-show and post-show press coverage included the publication of several lengthy articles in trade dailies and monthlies. Five prominent trade journals in the computer field were represented on the exhibit floor. Dr. Albert Hoagland, Board Chairman, U.S. National Computer Conference (NCC) gave a presentation at the exhibition to promote French attendance at NCC in Dallas, June 13-16.

'Don't Pass Them Up'

The following recommendation is from a copyrighted article in *U.S. News & World Repo.* of April 4:

Don't pass up the trade centers run by the U.S. Department of Commerce. They are in commercial hubs: Stockholm, Cologne, London, Paris, Milan, Tehran, Sao Paulo, Mexico City, Sydney, Tokyo and Seoul. Each stages special exhibits throughout the year that attract wholesale buyers of specific goods.

Says an executive of one U.S. firm in Italy: "When it comes to hard sales per exhibiting dollar, nothing beats the trade fairs of our own government."

The U.S. shows are scheduled on the basis of careful market research, and American firms are told in advance what would sell well in a certain region.

In Milan, the U.S. trade center's shows on automation and chemicals are considered so important that buyers from throughout the world attend.

Experts have this advice for exhibitors: Check your prospective market, choose a trade fair that fits your aims and don't forget the working samples.

ANNUAL COMPUTER SHOW—*At the Paris U.S. Trade Center last month, an exhibitor explains to a customer the functioning of a new Ampex tape drive.*

JAPAN ECONOMIC OUTLOOK MADE COMPLEX, UNCERTAIN BY FOREIGN DEVELOPMENTS

During the latter half of 1976 the Japanese economy paused in its recovery from the 1974-75 recession. The economic outlook for the remainder of 1977 is for continued growth at a moderate pace, according to the U.S. Embassy in Tokyo, with foreign trade expanding more slowly than in 1976.

Developments in the Japanese economy are seriously affected by conditions abroad which are hard to predict and, in large part, uncontrollable. Several events of 1976 underscored this fact. These include the oil price rise of December; the American and Soviet establishment of 200-mile offshore fishery zones with their disquieting implications for the Japanese fishing industry; and a number of disagreements with trading partners, with attendant concerns about possible market disruptions if the problems are not solved. More recently, a ruling by the U.S. Customs Court on April 12 that Japanese electronic products sold in the United States are being indirectly subsidized by the Japanese Government has serious implications for the Japanese economy. If upheld, the ruling would require the Secretary of the Treasury to impose countervailing duties equal to the amount of the alleged subsidy.

Electrical Standards

Any U.S. firm hoping to market electrical appliances in Japan must meet a government standards approval test.

This 2½ month process, conducted by the Ministry of International Trade and Industry, is described in detail in a report prepared by the U.S. Embassy in Tokyo. "How to Obtain Japanese Electrical Standards Approval, DIB 77-0-013," can be obtained from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161 at $3.50 per copy. Specific marketing information is also available from Arthur Miyakawa, Japan Country Specialist, Room 1015, U.S. Department of Commerce, Washington, D.C. 20230.

These developments have not been of the kind which would obviously suggest radical changes in policy. Rather they have created an atmosphere of mild instability, which is likely to encourage caution among economic policymakers. This caution is likely to be heightened by the Japanese Government's new and apparently continuing need to take special measures in order to balance its ordinary government budget. During last fiscal year (ending March 31) Japan had to depend on bond issuance for a share unprecedented in peacetime—almost 30 percent—of its ordinary budget revenues, and it is expected that during fiscal 1977 the same kind of financing will be required on at least the same scale.

With these various encouragements to circumspection, and in the absence of either a clear policy consensus or clear threat, the economy during 1977 may be expected to balance the sluggishness of current private demand with a continuation of moderately expansionary government policy.

The Japanese Government's medium-term plan for 1976-1980 was published in May 1976. This document projected a real annual GNP growth rate of 6 percent for the whole period, and it set as a target for the first year or two of the period a 7 percent annual growth rate. Such a pattern would firmly establish Japan's recovery from the recession years 1974-75.

The government has undertaken expansionary steps designed to approach this higher rate of growth despite the present sluggishness of the economy. It aims at stimulation of the economy through the FY77 budget and a lower discount rate (from 6.5 to 6.0 percent on March 12) by the Bank of Japan. With steps such as these, the government now is anticipating a real growth rate of between 6.0 and 6.5 percent for fiscal 1977; the OECD projection for calendar 1977 is 6.0 percent, with more rapid growth forecast for the first half than the second.

During 1977, the weakest link in Japanese prospects for economic growth is likely to be investment. Manufacturing and mining investment, after stagnating during most of 1976, had been expected to increase during following months. In particular, the high profit patterns of spring and summer 1976 might seem to encourage new capital formation. However, declines in capacity utilization, production and GNP growth, together with the depressive effect of the December oil price rise, may well keep new investment below earlier expectations. For FY77, a mild decline in investment was forecast early in the fall of 1976. More recent developments in the Japanese economy have done nothing to justify reversing this prediction. However, strong management of the economy, which many business leaders reportedly expect of the

JAPANESE EXPORT—*Sumitomo Heavy Industries, Ltd. (SHI), Tokyo, has recently shipped what it claims to be the world's largest power shovel to Russia. The "Sumitomo Marion 204M," completed at SHI's Ehime Works, is the first of ten units made to order for the Soviet Union Government Purchasing Organization for Machinery (Machino Import). SHI and Marion Power Shovel, Inc. of the United States formed a technical tie-up in 1970 to further heavy-duty power shovel production. This model, especially designed for use in large-scale excavating operations, is said to increase production by 30 percent and to be able to function in extremely low temperatures.*

new Fukuda government, could become an important positive factor in decisions of potential investors.

Personal consumption, more heavily influenced by inertia than other kinds of demand, appears likely to continue the slow and fairly stable increase which characterized it through most of 1976. This expectation mainly reflects income trends. Summer and year-end bonuses for workers were moderate. Further, although several labor organizations already have expressed intention of seeking income increases in excess of 15 percent during the spring wage negotiations, it is doubtful whether nearly so high an increase will be acceptable to a society trying to find its way back to stable growth.

Price inflation also still requires close watching. Given recent trends, it is unlikely that the government reached its target of holding the Consumer Price Index increase in the fiscal year ended March 31 to 8 percent. That the goal for the current year is to hold the same figure within 7.8 percent, is a measure of the government's continuing concern with, and modest expectations for keeping consumer prices stable.

A slowdown in world trade expansion as a result of the recent pause in the industrialized nations' recovery would affect Japan as much as any other leading trading nation. For Japan's trade to grow smoothly within this limitation, much will depend on the ability and inclination of the Japanese to continue their recent steady increase in imports. Yet the current lack of robustness in domestic demand makes it unlikely that any major import gains will occur unless specific measures are taken to liberalize or remove various kinds of import restrictions currently in effect in Japan.

U.S. exporters can participate

As the increase in Japanese imports continues at a modest pace, American exporters who give priority to Japan in their marketing plans and strategy should find themselves in a good position to participate in this growth. In a number of areas the comparative price levels in Japan and the United States will operate to American exporters' advantage in the Japanese market.

Promising product areas for exports to Japan include computers and peripheral equipment, electronic components, process control instruments, food processing and packaging equipment, analytical instruments, bio-medical equipment, electronics industry production and test equipment, pollution control and measuring equipment, hydraulic equipment and components, mechanical handling equipment, automotive parts and equipment, avionics and ground support equipment, printing and graphic arts equipment, building systems and materials, oceanographic equipment, and marine equipment.

The outlook for sales of U.S. consumer goods appear promising. American products are increasingly price competitive, and the prestige-conscious Japanese consumer is often prepared to pay a premium for the "Made in U.S.A." label. Sales of U.S. consumer goods held up well during the recession, even while Japanese imports in most categories fell off. American suppliers should continue to benefit from gradually increasing consumer demand and from replenishing of inventory by Japanese distributors and retailers.

The Japanese Government has completed its long-scheduled liberalization of direct investments. However, the long economic recession has had a negative impact on investment decisions by foreign as well as domestic investors in Japan. Consequently, new direct foreign investments during the past three years have lagged slightly below earlier periods.

CANADA MAKES CHANGES IN ITS IMPORT TARIFFS

As a result of the March 31 budget presentation, Canada has taken several tariff actions of interest to U.S. exporters.

The tariff cuts introduced in February 1973 for one year on a wide range of consumer products and subsequently renewed in most cases until June 30, 1977, were extended, with two exceptions, until June 30, 1978. Products to which the cuts, averaging five percentage points, apply include: edible meat offals, canned meats, prepared cereal foods, biscuits and pretzels, peanut butter, macaroni and vermicelli, frozen vegetables, canned clams and crabs, tomato and pineapple juices, soups, film, pharmaceuticals, perfumes, and toilet preparations, soaps and washing preparations, tableware and kitchenware, typewriters, vacuum cleaners and carpet sweepers, power lawn mowers, certain hand tools, fishing gear, cameras and projectors, certain sporting goods, phonograph records and tapes, and pens.

The two items excepted from the tariff cut extensions are light fixtures and refined sugar. On July 1 of this year the 15 percent reduced duty rate on light fixtures will expire and the regular 20 percent rate will go back into effect. At the same time, the reduced rate on refined sugar will be increased by one-fifth of a cent per pound. This new refined sugar duty, effective until June 30, 1978, will still be lower than the duty applied prior to the February 1973 reduction.

The duty-free treatment of aircraft and aircraft engines of types and sizes not made in Canada (tariff items 44043-1 and 44047-1) was extended for another year until June 30, 1978.

British preferential tariff rates were withdrawn, as of April 1 of this year, on imports from the United Kingdom and the Republic of Ireland of the following machinery items: fork lift trucks, front-end loaders or tractor shovels, gear reducers, pumps and pump sets, motor operated valves, positive displacement blowers and vacuum pumps, metalworking lathes, metalworking milling machines, cutting tools for use with metalworking machines; accessories, attachments and control equipment for use therewith; and parts of the foregoing. The preferential tariff rate has been 2.5 percent; the Most-Favored-Nation tariff rate, which now applies, is 15 percent. Similar action was taken in May of last year on compressor sets and electricity generating sets. The duty can still be remitted on any of these items under the Machinery Program if they are not available from Canadian sources.

On April 1 of this year, duties on a range of items of special interest to developing countries were reduced or eliminated on a Most-Favored-Nation basis or on a preferential basis under Canada's Generalized System of Preferences (GSP). Items given preferential treatment include peanut butter, processed coffee, cigar wrapper tobacco, bulk orange juice concentrate, liqueurs, and wood veneers.

More specific information regarding these actions may be obtained from the Office of International Marketing, Room 4002, U.S. Dept. of Commerce, Washington, D.C. 20230, telephone 202-377-2346.

Canadian Markets Surveyed By Consulate General, Toronto

Surveys have been prepared by the U.S. Consulate General in Toronto on the Canadian markets for electronic products and for metalworking and finishing machinery and equipment. Long-term prospects for U.S. exports in both areas are bright, according to the surveys. Competitive advantages in these product categories will help American exporters maintain their dominance of the markets.

Certain segments of Canada's electronics production industry face serious problems. Consequently, imports will continue to take an increasing share of this $3.5 billion market. The United States supplies more than two-thirds of the Canadian import market for metalworking and finishing equipment, and more than half of the total market.

Copies of these reports are available from the U.S. Department of Commerce, Office of International Marketing, Canadian Trade Specialist, Room 4217, Washington, D.C. 20230.

TAIWAN SHOWS IMPRESSIVE GROWTH, BUT COMPETITION IN ITS MARKETS IS INTENSE

This year may present some economic problems for the Republic of China, but on balance it should be a satisfactory period even if growth does not equal the 1976 rate. Sales of U.S. goods and services should show gains and hopefully narrow the gap in trade which developed during 1976, according to Roderick N. Grant, Commercial Officer at the U.S. Embassy in Taipei.

While Taiwan's recovery from the 1974-1975 recession was impressive statistically, the intense international competition it faced forced the country's exporters to cut prices to the point where for many the large volume of sales was not producing profits. This year may see a number of marginal companies go out of business as a result.

The general outlook for this year depends largely on what happens in the economies of Taiwan's major trading partners. Officials are counting on recovery measures being taken in major markets—the United States, Japan and Western Europe. If these countries continue their recovery from the economic slump, Taiwan is expected to have a good year in terms of economic growth, although not at the rapid rate of 1976.

Projections for 1977

Economic planners have projected a real growth rate of 8.5 percent during 1977. This estimate shows basic industry growing by 13 percent, manufacturing 14.1 percent, construction 7.9 percent, transportation and communications 9 percent, services 4 percent and agriculture 2.4 percent. These projections presuppose foreign trade growing 18 percent to $18.5 billion, a figure which may be difficult to reach under present world economic conditions and in view of the restrictions being placed on some of Taiwan's major export items.

Price levels, which were among the world's most stable during 1976, with both wholesale and retail indexes rising less than 3 percent, are projected to rise less than 5 percent during 1977 despite the oil price increase. Price stability will continue to be a major object of economic policy.

Under the stimulus of resurgent export demand, the Gross National Product of the Republic of China reached an estimated $17.1 billion in current prices during 1976, an increase of 11.8 percent in real terms over 1975. Foreign trade, which provided the principal impetus for this growth, reached a record $15.7 billion, up 39 percent from 1975 levels. Exports, at $8.1 billion, rose 52 percent, while imports, at $7.6 billion, were up 27.5 percent for the year. The resulting trade surplus of $490 million compares with a deficit of $643 million the previous year, leaving foreign exchange reserves amounting to a healthy $2.9 billion.

On Taiwan's import side, manufactured products ($4.6 billion) increased 21 percent over the $3.8 billion in 1975, with electrical machinery showing the highest growth at 51.5 percent, or an increase from $538.2 million to $815.6 million. Basic metals rose 24 percent from $511.3 million to $634.2 million, while machine tools, the largest single category, increased 12.2 percent from $1,059 million to $1,188 million.

Japan was again Taiwan's major supplier, with sales of $2.4 billion during the year, an increase of 35 percent over 1975. Sales from the United States were $1.8 billion, 9.1 percent greater than in 1975. For the year, the United States held a 23.8 percent share of the import market, in comparison with 27.7 percent in 1975, while Japan accounted for 32.2 percent, an increase from 30.4 percent in 1975. The fact that Japan supplies raw materials and components for Taiwan's rapidly expanding export industries partially explains the change in market shares for the year.

The United States remained by far the most important market for Taiwan's exports, with purchases reaching $3.01 billion during 1976, an increase of 65.2 percent over 1975, accounting for 37 percent of the total. Japan was the country's second largest foreign market, with purchases amounting to $1.1 billion, for an increase of 57.1 percent, and 13.5 percent of the total. Taiwan continued to broaden its overseas markets during 1976, with large percentage increases in exports to other markets throughout the world, although from much smaller bases.

By year-end the Japanese were enjoying a $1.35 billion surplus in their bilateral trade with Taiwan, while the United States had a $1.2 billion deficit.

Blueprint for growth

The government in October approved a Six-Year Economic Development Plan, which is a blueprint for growth during the 1976-1981 period. The plan envisions an annual growth rate of 7.5 percent, with exports growing at 12.2 percent, imports 10.6 percent, industry 9.5 percent and agriculture 2.5 percent, and population rising at a 1.8 percent rate. The plan will be used as a guide for public expenditures, and the government will use monetary and fiscal policies to channel investments in the direction indicated by the plan.

The underlying goal of the plan is to transform the economy from one based on labor-intensive light industries to high-technology, capital-intensive industries. The ten major projects now in late stages of completion—electrification of the railway system; a north-south freeway; nuclear power plants; development of the petrochemical industry; an integrated steel mill; a shipbuilding facility with a 1.5 million-ton annual production capacity; a new harbor in Taichung; a railroad linking Suao and Hualien; a new international airport at Taoyuan; and enlargement of Suao-Harbor on Taiwan's northeast coast—will create an infrastructure to support this transformation of the economy.

In the industrial sector, the plan calls for (1) creation of adequate domestic energy supplies through intensified exploration for inshore and offshore oil and gas resources, diversification of crude oil supplies and expansion of nuclear power generation; (2) accelerated development of capital and technological-intensive industries, including basic metals, heavy generators, precision tools, electronic components, scientific instruments, telecommunications equipment, and downstream petrochemical projects; (3) improvement in technical know-how and equipment for export industries, including upgrading the textile, plastics and food industries; (4) development of defense industries, including assistance to both public and private enterprises for production of defense equipment and supplies; (5) intensified research and development of new industrial know-how, including encouragement to private firms for purchase of patents and licenses, more effective protection of patent holders, and strengthening preferential tax treatment accorded research and development; (6) strengthening assistance to small and medium-sized business through creation of a more efficient credit system to encourage acquisition of new equipment and promotion of low-cost semi-automation to standardize products and increase efficiency; and (7) introduction of a more rigorous product inspection system to improve the quality of exports. These programs should provide many opportunities for U.S. manufacturing and service industries in direct sales, technical cooperation and investment.

New investment incentives

In accordance with the program outlined above, the government will revise its "Statute for Encouragement of Investment" to establish more attractive tax incentives for investments in capital and technology-intensive industries. According to reports, the current five-year tax holiday will be extended by one to three years for investments meeting the criteria, and qualified enterprises will be given duty-free privileges for domestic production. Tax incentives will also be given to large trading companies to stimulate exports. The current period of reduced income tax will be extended by

one to two years. Interest on one-year term savings deposits, postal savings and trust funds for qualified firms will be exempt from withholding and payment of consolidated income tax.

According to the Industrial Development and Investment Center of the Ministry of Economic Affairs, investments to produce 89 products falling within the following sectors will benefit from the special incentives; metals, machinery, transportation equipment, vehicle parts, electronics, electrical equipment, photographic equipment, paper products, chemicals, yardware and crystal products.

Potential U.S. investors should thus find a hospitable climate in a wide variety of fields where American industry maintains a leadership role.

This year should provide good sales prospects for American exporters, especially in view of the desire of the Republic of China Government to increase purchases from the United States because of the large imbalance in trade between the two countries. This has been translated into some government tenders limited to procurement from North America and Europe, or sometimes simply from the United States. According to U.S. Embassy studies and independent research, the following equipment categories should provide the best sales opportunities during 1977; process and quality control, metalworking, materials handling, pollution control, electronics industry, data processing and data communications, textile and apparel manufacturing, food processing and packaging, automotive maintenance and medical.

U.S. Suppliers Can Do Plenty Of Business In Nicaragua; Expertise, Capital Also Sought

Nicaragua's overall economic picture is bright and prospects for the remainder of this year are good, reports the U.S. Embassy in Managua. The country's growing economy provides excellent opportunities for U.S. firms.

Nicaragua enjoyed both trade and balance of payments surpluses in 1976, owing primarily to high prices for cotton and coffee exports and a slowdown in imports. The local private sector has been cautious about making new investments, but increased domestic savings and lower import expenditures have enabled Nicaragua to reduce somewhat its short-term foreign debts. The government, moreover, succeeded in negotiating over $200 million in new loans during 1976 from various institutions. Nicaragua's debt service ratio, though creeping upward, remains manageable.

Nicaragua should continue to enjoy political stability for some time to come. President Somoza and his Liberal Party have a majority in the legislature and no national elections are scheduled until 1981. At that time, under the present constitution, over 45 years of Somoza family rule will come to an end. Even this prospect, however, does not presently justify concern for the nation's stability and a continuation of its general predilection toward Americans and things American. Meanwhile, during 1976, the government inflicted heavy blows on the local guerilla organization and now faces no serious threat from that quarter.

Favorable outlook

Nicaragua's export earnings in 1977 should increase by over $100 million. Coffee is expected to bring in between $160 and $170 million, thus exceeding for the first time in recent memory cotton earnings (estimated at about $160 million). Income from exports of meat (Nicaragua's allotment under the 1977 U.S. voluntary import meat program is up to 50.7 million pounds), seafood (Nicaragua plans to add tuna to its shrimp and lobster exports), and textiles should also grow substantially.

Nicaragua's expected 1977 balance of payments surplus ($25 million) will be slightly smaller than in 1976. Imports should revive and expenditures for invisibles, including debt service, will eat further into the anticipated trade surplus. The nation's GDP should, nonetheless, approach $2,100 million by the end of the year. The government's draft budget for 1977 foresees expenditures of about $380 million (some $60 million higher than budgeted for 1976) and calls for greatly increased (70 percent higher) domestic and foreign borrowing. Drawdowns from foreign loans should total nearly $100 million.

Excellent opportunities

U.S. suppliers, benefiting from their proximity to Nicaragua, traditional trade ties, and generally good reputation, should continue to dominate Nicaragua's non-oil imports from outside the CACM. Agriculture, which provides the base for the country's economic growth, offers an expanding market for farm machinery, fertilizers, irrigation equipment, storage facilities and breeding cattle. The desire to maximize yields and profits from major export crops should give impetus to greater mechanization and utilization of fertilizers, pesticides and fungicides—the latter to combat coffee blight. The 1976 drought, moreover, has led to increased interest in irrigation systems and grain storage facilities.

Nicaragua's demand for manufactured goods can be only partially satisfied by the CACM. Hence there is a market for a wide variety of U.S. non-farm products as well. These include motor vehicles, food processing and packaging machinery, health care equipment, pharmaceuticals, construction equipment and materials, industrial machinery and communications equipment. Nicaragua is also expected to make major purchases of civilian and military aircraft and ground support equipment in the near future. Sales of imported consumer goods of all types continue strong, and the record export earnings recorded in 1976 and expected in 1977 should swell such sales even further.

U.S. firms will have to compete aggressively with third-country firms on several major projects. These include development of 100 megawatts of geothermal power, a 200-MW hydroelectric dam, the 100-mile inner-coastal canal and a deep water port on the Caribbean coast, substantial upgrading of the country's regional airports, and a 120,000-acre irrigation scheme between Nicaragua's two large inland lakes. Sales of foreign equipment and services related to these projects will total hundreds of millions of dollars.

Wide variety of inducements

The investment climate for American companies is generally good. The Nicaraguan Government provides a wide variety of incentives to attract new investments, including tax holidays, duty-free entry of capital equipment, and duty-free entry of raw materials for the reexport of finished products. There are no restrictions on the share of foreign ownership in local firms or on the employment of foreign nationals, and there are no exchange controls or limitations on profit remittances. All OPIC programs are available to American investors in Nicaragua. Nicaragua's Foreign Investment Law guarantees foreign firms treatment no less favorable than that accorded nationals. However, notwithstanding these laws encouraging foreign investment, legal and bureaucratic procedures have on occasion discouraged would-be investors from doing business in Nicaragua.

The most attractive investment opportunities for American firms seem to be in agriculture and agroindustry. Blessed with ample fertile land, Nicaragua can continue to expand agricultural output at a rapid pace for many years to come. The expertise and financial contributions of foreign firms is actively being sought to assist in the development of agriculture and agroindustry. The textile industry also offers attractive investment opportunities, especially within the free trade zone at the Managua airport.

Ecuador's Market Can Absorb Greater Volume Of Products; Financing Remains Important

Ecuador achieved an impressive growth rate (5.7 percent in real terms) and a strong balance of payments surplus in 1976 despite shortages of electric power and most fuels that depressed industrial production. The shortages are expected to ease greatly this year as a result of remedial measures and new facilities, allowing further economic progress and raising the possibility that import curbs imposed since late 1975 may be lifted or moderated sometime during the year. Prospects for most U.S. exports to Ecuador are good regardless—capital goods, raw materials and many intermediate goods are exempted from the controls—but easing of the restrictions would open opportunities for large gains in U.S. sales of other products, according to the U.S. Embassy in Quito.

Despite the stringent import curbs, Ecuador's imports in 1976 rose by an estimated 7 percent over the 1975 value. While much of the rise was attributable to price inflation, there were significant increases in imports of products mentioned above that are generally exempted from the curbs. Virtually all other categories declined, with the notable exception of pharmaceuticals.

The need for industrial raw materials and intermediates continues to grow and should accelerate this year with the expected upturn in manufacturing activity. The need for imported construction materials remains acute in the face of persistently inadequate domestic production of cement and other items.

Imports of industrial capital goods, which had burgeoned for several years until the 1975 decline, should register at least a small increase as some major infrastructure projects are reaching the implementation stage.

The major category that will probably increase most strongly, in real percentage, is transportation equipment, as the government has ended the ban it had imposed since June 1975 on imports of most private automotive vehicles.

Imports of consumer goods may generally increase this year. In fact, there are indications that imports of many kinds of consumer goods began to accelerate in late 1976 as items such as clothing and household appliances began to need replacement and the buying public became resigned to paying the higher prices brought about by the surcharges on imports.

Slightly offsetting the general uptrend in imports will be the virtual elimination of fuels imports after the new Esmeraldas refinery comes on-stream around mid-1977. Fuels imports cost an estimated $9 million in 1976.

The U.S. share of Ecuador's import market has historically tended to rise when the total market grows strongly. Accordingly, if and when the import curbs are eliminated or reduced, U.S. suppliers stand to win the lion's share of resultant orders for imports—probably over 40 percent of the increment, in addition to the roughly 40 percent share they already enjoy.

Meanwhile, in the face of both the import curbs and the government's indicated policy of tightening credits to the private and public sectors, U.S. exporters will find it necessary and worthwhile to offer relatively generous financing to their Ecuadorean customers. At present, Ecuadoreans are tending to buy from the supplier who offers the best payment terms rather than the best price.

Ecuador's Priority Growth Sector

Agriculture remains the backbone of the Ecuadorean economy. Recognizing that the economic future of the country is heavily dependent on development of this sector, officials at the U.S. Embassy in Quito have prepared a market study analyzing the growing opportunities in the Ecuadorean market for agricultural machinery and equipment. The report notes that virtually no agricultural machinery and equipment is produced in Ecuador, while the government is actively encouraging the agricultural development that is generating heavy demand for these products. Incentives in this sector include: duty-free importation of all machinery and equipment used in agriculture; National Development Bank loans for the acquisition of agricultural machinery and equipment; special credit from the Ecuadorean Central Bank for agricultural purposes; and a new requirement that private and public banks set aside 20 percent of each bank's loan portfolio for loans granted specifically for agricultural purposes.

These developments add up to unusual opportunities, according to the Embassy's market study, which lists 30 major prospective customers of agricultural items, 16 major associations and chambers of agriculture, and 39 potential agents and distributors. The full report, *Agricultural Machinery and Equipment in Ecuador,* is available at $4 per copy from National Technical Information Service (NTIS), U.S. Department of Commerce, Springfield, Va. 22161. Specify report number DIB 77-05-002.

The Government of Ecuador's much-publicized dispute with the Gulf Oil Company appears to have ended in a mutually satisfactory and amicable agreement for the government to buy out Gulf's holdings in Ecuador. This settlement reflects the government's desire to preserve a favorable reputation among prospective foreign investors. The oil sector remains especially important and sensitive for Ecuador, and the government can be expected to continue to be finicky in determining the terms and conditions for investments for oil exploration and exploitation; but in virtually all other investment sectors, the government has generally demonstrated a desire to move full steam ahead to attract more foreign investors. In 1976 it established a number of new incentives for foreign investment in a wide variety of sectors. The recent liberalization of Decision 24 of the Andean Pact appears also to have prompted a new surge of investor interest in the Ecuadorean scene, on the part of European as well as U.S. investors, and Ecuadorean officials have asserted they intend to implement the new policy liberally.

Coffee Windfall Is Spreading Liquidity Through Costa Rica, Resurrecting Inflation Fears

In 1976, Costa Rica achieved a significant gain in real economic growth while making substantial progress in overcoming inflation and a serious balance of payments deficit. The foundation laid in 1976 prepares the way for continued recovery and sound growth in 1977, if inflation is kept under control, according to the U.S. Embassy in San Jose.

Real growth in Gross Domestic Product in 1976 was estimated at 5.5 percent, a healthy increase from the 3.3 percent of the previous year and a return to close to the 6 percent annual growth that prevailed in the prosperous decade of the sixties. Exports of traditional agricultural products increased by 14 percent in value, assisted by high coffee prices and continued favorable prices for bananas. Exports of manufactures, mainly to other countries of the Central American Common Market, increased by a striking 31 percent.

Progress in reducing inflation and the trade deficit was impressive. Inflation, as measured by the wholesale price index, fell to 9.2 percent in 1976, as compared to 14.3 in 1975 and 38 percent in 1974. The trade deficit was reduced to $185 million, as compared to the peak level of $281 million reached in 1974 and the $204 million level of 1975. The main instruments used to combat these two problems were credit restraints and very high surcharges on non-essential imports. The government also attempted to exer-

cise budgetary restraint, but overall expenditures nevertheless grew by 25 percent.

High coffee prices promise to bring an unprecedented increase in income in 1977 to the substantial segment of the Costa Rican economy that is dependent on that crop. Total earnings from coffee are expected to rise some 86 percent to $298 million. Bananas, Costa Rica's second most important crop, are selling at good prices now and are expected to earn about the same amount as last year, about $145 million. Beef export prospects are limited by voluntary restraints on shipments to the U.S. market, but a slight increase in the restraint level plus increased efforts to ship beef to new markets should yield a modest increase over the estimated $36 million earned by beef exports in 1976. Sugar producers, plagued by very low prices, must look toward another bad year.

Overall growth of the economy, in terms of real GDP, is expected to be 6 percent in 1977. Employment will also rise, but substantial unemployment will continue to exist except during the height of the coffee picking season.

Management of prosperity to prevent a renewed outbreak of inflation will be the main challenge facing the government in 1977. The potential threat comes from excess liquidity in the private sector as a result of high coffee prices and from the political pressures for increased government spending in a pre-election year.

A program has already been formulated to soak up excess liquidity from the unprecedented increase in coffee prices. The government is offering special bonds and hopes to sell $500 million to coffee producers and the general public. The government has also raised the interest rate on loans to the coffee sector to encourage self-financing by producers. Increased reserve requirements imposed on commercial banks will also reduce credit availability, and the Central Bank will hold total credit expansion to 14 percent.

The government's budget deficit is difficult to estimate precisely, because the usual practice in Costa Rica is to have one or more supplemental budgets in the course of the year, but it is likely to be of the same order of magnitude as last year. Financing a deficit of that size without touching off inflation is considered to be within the capabilities of the monetary authorities.

A substantial improvement in Costa Rica's balance of payments is expected in 1977. Exports are expected to rise 26 percent, thanks mainly to the expected big increase in earnings from coffee. As imports are expected to rise only about 17 percent, the trade deficit will shrink to about $149 million. This would be considered a normal deficit, requiring only a moderate level of borrowing, given the substantial inflow of capital from private investment and development assistance.

IN COSTA RICA'S INTERIOR—*Many isolated farming communities are being linked with highways under programs supported by the Inter-American Development Bank.*

Foreign exchange reserves are expected to increase about $190 million by the end of 1977, if all goes according to plan. If, however, coffee producers fail to subscribe fully to bond sales, or if government expenditures should rise more than expected, the effects would show up in additional balance of payments outflow, and the increase in reserves would be somewhat less than predicted. Such a slippage from policy goals, while not troublesome in the short run, would represent a partial loss of the opportunity presented by exceptionally high coffee prices to build reserves against the time when coffee prices fall.

The United States, traditionally Costa Rica's most important source of imported goods, maintained in 1976 its normal market share of 33 percent. As total imports increased by 11 percent, the total value of U.S. exports to Costa Rica rose to an estimated $256 million.

The best opportunities for U.S. exporters in 1977 will be in capital and specialized equipment in such areas as electrical power generation, communications, and health care. While the majority of purchases for infrastructure type projects will continue to be financed by international lending institutions, for projects for which such financing is not available, individual ministries and autonomous institutions can be expected to rely on financing arranged by the supplier. U.S. suppliers' success in winning such bids will depend on their ability to provide the buyers with competitive financing packages.

Exports of consumer goods to Costa Rica will continue to be affected by high taxes levied by the Costa Rican Government for balance of payments reasons. However, the high earnings from coffee will give a strong stimulus to consumer sales, and to importation of desirable products for which locally-produced close substitutes are not available.

The market for many U.S. agricultural products in Costa Rica, especially corn and beans, has declined as the Costa Rican Government has given increased stimulus to food production. However, U.S. wheat sales remain strong ($12.6 million in 1976), and sales of dairy cattle and oil meal are also expected to be good in 1977. The outlook for many other U.S. agricultural exports will depend on growing conditions for competitive production there. Total sales of U.S. agricultural products were $22 million in 1976.

A number of projects offer significant opportunities for sale of U.S. equipment or provision of services.

Costa Rica continues to offer a favorable investment climate. From the viewpoint of the foreign investor, constitutional guarantees of equal treatment, enforced by an independent judiciary, are of particular importance. The government encourages foreign investment in projects considered beneficial to the country, and the incentives offered vary depending on such factors as use of local resources, employment created, export potential, and whether a similar industry already exists in Costa Rica or within the Central American Common Market. A highly educated and readily trainable labor force and a large hydroelectric potential are additional attractions to the potential investor. Earnings on approved and registered investments may be repatriated freely.

The climate for investment in mining enterprises will depend on revision of the mining code now under way. Foreign ownership of land in Costa Rica is not restricted, but there is opposition to speculative or non-productive holdings.

Potential investors interested in obtaining detailed information on investment incentives offered by the Costa Rican Government may write directly to: Export and Investment Promotion Center (CENPRO), P.O. Box 5418, San Jose.

Calendar For World Traders

April 27 — Portland, Ore. — Commerce District Office Near East marketing seminar. Speaker: Peter Hale, Director, Commerce Action Group for Near East.

April 27—New York — International Executives Assn. meeting, Summit Hotel. Theme: Tax Reform and You.

April 27—Chicago—Seminar and luncheon program: New Opportunities for Profit in the Common Market, Ambassador West Hotel. Sponsors: Chicago Assn. of Commerce and Industry, International Trade Club of Chicago, Commerce District Office, in cooperation with Netherlands Investment Foundation of Amsterdam.

April 27-29—New York — World Trade Institute programs on Financing Exports and Imports; International Currency—Tax and Accounting Aspects; International Estate Planning: Tax and Other Legal Aspects; Tax Aspects of International Reorganizations.

May 1-3—Hershey, Pa.—Second Annual Pennsylvania International Trade Conference, Hershey Motor Lodge. Registration: P.O. Box 1151, Harrisburg, Pa. 17108.

May 1-4—Montreal—Financial Analysts Federation annual conference, Queen Elizabeth Hotel. Focus is on international economic and monetary matters. Information: 212-557-0055.

May 3—Memphis—Business Conference on Japan, Holiday Inn-Rivermont. Sponsors: Memphis in May International Festival Society, Commerce District Office, State of Tennessee. Speakers include Tennessee Governor Ray Blanton.

May 4-6—Akron—Academy of Marketing Science annual conference: Marketing to Canada and Western Europe, Akron Cascade Holiday Inn. Information: Ivan R. Vernon, 817-755-3523.

May 5—Memphis—Mid-South Exporters' Roundtable, Monte's Restaurant.

May 9—Cambridge, Mass.—Seminar on New Developments in Soviet Foreign Trade. Presented by Harvard University's Russian Research Center in cooperation with Commerce's Bureau of East-West Trade. Discussion will focus on Soviet ability to pay for imports from the West, on joint projects being worked out in the Soviet Union and Eastern Europe, and on U.S. Government policy toward East-West trade. Information: Marshall Goldman, Assoc. Dir., Harvard Univ. Russian Research Center, 617-495-4037.

May 9-10—New York — Conference of international banking/financial executives sponsored by International Reports, Inc., Waldorf Astoria. Theme: New Vistas for International Banking/Finance in the U.S.A. Congressman Henry S. Reuss, Chairman of the House Committee on Banking, Finance and Urban Affairs, will report on Expected Legislative Changes on International Banking in the U.S. Information: Jeanne Weisgrau, 212-477-0003.

May 9-12—Chicago—Special World Trade Institute seminars on Marine Cargo Insurance and Foreign Tax Planning, Playboy Towers Hotel.

May 10—Louisville—Kentuckiana World Commerce Council meeting, Holiday Inn Brownsboro Northeast.

May 11—Anaheim, Calif.—Int'l Marketing Assn. of Orange County meeting. Rauer H. Meyer, Director of Commerce's Office of Export Administration, will speak.

May 11—New York — FCIB Book Exporters Credit Group meeting, Summit Hotel.

May 11 — Greenville, S.C. — Greenville-Spartanburg Int'l Trade Club annual World Trade Celebration Dinner meeting, Textile Hall. Reservations: 803-233-2562.

May 12 — Columbia, S.C. — Midlands Trade Club World Trade Week Celebration Dinner, Carolina Town House. Reservations: 803-758-3531.

May 12—Louisville—International Credit and Finance Assn. meeting, Rodeway Inn.

May 12—Seattle—Third Annual International Trade Conference, Seattle Center Playhouse. Theme: Agriculture & Int'l Trade. Sponsors: Washington State Departments of Commerce and Agriculture, Commerce District Office, Seattle Chamber of Commerce. Information: Donald B. Jackson, 206-464-6282.

INTERNATIONAL BUSINESS REPORTS

Equipment Safety—An International Survey. Published by Technical Help to Exporters (THE), export advisory service of British Standards Institute. $64.
This comprehensive guide to legislation relating to industrial equipment safety in 64 countries throughout the world is an English translation of the book Maschinenbau-Anstalten, published by the Assn. of German Machinery Manufacturers. Identifies legislation governing the design and use of equipment in a wide range of industries. Regulations relating to pressure vessels, electrical installations and worker protection are mentioned for most countries, and where appropriate, information is given on approval and test procedures, penalties for non-compliance, and relevant approval authorities. In addition, there are chapters on international rules and EEC harmonization.

It is intended that the guide will be continually reviewed and brought up to date. Price includes future amendments produced until January 1978.

Write: National Technical Information Service, Springfield, Va. 22161. Please cite number BTHE030871.

The International Monetary System, 1945-76: An Insider's View. By Robert Solomon. $17.50.
The author, a Senior Fellow at Brookings Institution and for many years the U.S. Federal Reserve Board's top international economist, "blends history, analysis and memoir in this book, portraying the negotiators who struggled through a succession of crises to evolve a new monetary order."

Write: Harper & Row, 10 East 53rd St., New York, N.Y. 10022.

Overseas Assignment Directory Service. Updated monthly. Published by Knowledge Industry Publications. $275 per year.
Ongoing service that provides current information on traveling and doing business abroad with a strong accent on the developing countries. "Geared for the international personnel or travel departments of multinational corporations—or anyone in any industry responsible for sending personnel to and from all corners of the globe," it offers subscribers an "array of current, pertinent travel data."

Write: Knowledge Industry Publications, 2 Corporate Park Dr., White Plains, N.Y. 10604.

Financial Reporting in Japan. By Robert J. Ballon, Iwao Tomita and Hajime Usami. 305pp. $15.
Deciphers accounting and auditing procedures and reporting standards on the basis of a detailed description of Japanese corporate organization and the nature of financing in Japan.

Write: Kodansha International, 10 East 53rd St., New York, N.Y. 10022.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, visits by foreign buyers and officials, and major construction and expansion projects.

Licensing, Investment Abroad

1611, 3272—SAUDI ARABIA — Seeks joint ventures with U.S. firms to **undertake road construction, and erection of industrialized precast concrete houses.** M. Nabeel, Sales Dept., Quaid Establishment, P.O. Box 5763, Riyadh. Telex: 20054 Tejaryh SJ; cable, QUAIDCO; telephone, 51180. P-77344. OPIC.

2048—KOREA—Joint venture partner sought to establish plant for producing **feeds for beef cattle, swine, poultry.** Korean firm hopes to import U.S. yellow corn for use as raw material. Established 1975, firm manufactures and markets feed. Moon-Woo Nam, Pres., Sewon Feeds Co., Ltd., Yongwon Bldg., Room 205, 11, 6-ka, Youngdungpo-dong, Youngdungpoku, Seoul 150. P-77307. OPIC.

2251, 2253, 2519, 3732—SAUDI ARABIA—Seeks joint venture to establish two factories—**a fiberglass plant and a facility to produce nylon stockings, socks, sweaters.** Saudi businessman, owner of trading company, will look to his partners to do all work to justify projects, beginning with market studies. He also seeks information on necessary equipment, production methods, cost, sources of raw materials, proposed product mix. Abdullah Al-Ghufaili, Owner, Al-Ghufaili Est. for Trading, Industry & Contracting, P.O. Box 185, Taif. P-77308. OPIC.

2321—NEW ZEALAND—Licensing arrangement desired for production of **men's knitted sport shirts.** Firm established 1932, employs about 200 persons, has annual turnover of $3 million. Operates its own knitting mill, sells directly to retailers in New Zealand and Australia. E. S. C. Slater, Merchandise Dir., Soma-President Textiles, Ltd., P.O. Box 9245, Wellington. P-77347.

2329—FRANCE — Licensing agreement sought to produce **men's cotton swimwear.** Firm established 1976, as manufacturer, wholesaler of men's swimwear. It manufactures 200-600 pieces daily; has sales outlet throughout France, representatives in Belgium, Netherlands. Fred Prysquel, Societe Saber, BP No. 5, 34, Blvd. Louis Blanc, 83990 St. Tropez. P-77309.

2330—JAPAN—Companies wish to establish contact with U.S. manufacturers of **women's, girls' knitted clothing.** Group of businessmen plans to visit U.S. this fall to discuss licensing arrangements for production, distribution in Japan of American-styled apparel. Interested firms should send product literature, company background to Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77310.

2511—PAPAU NEW GUINEA — Recently established company seeks joint venture with U.S. **furniture manufacturer** to undertake its expansion program. Firm currently produces laminated products, furniture components, paneling, moldings. Additional information from Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77311.

2519, 2531—GERMANY — Manufacturer of **bathroom fixtures and wardrobe furniture** seeks licenses from U.S. producers of similar products. Company owns production facilities for processing metal, plastics. Established 1875, has 300 employees. Sales territory includes Germany, EEC, EFTA countries. Reimund Schoppmann, Vollmann & Schmelzer, Friedrichstr. 45—Postfach 215, 5860 Iserlohn. Telex: 827811. P-77312.

2750—BELGIUM—Established firm seeks licenses for **new printing techniques.** Company does offset printing, bookbinding. Official of company plans to visit U.S. for discussions with interested American firms, trade associations. Itinerary: June 1-3, New York; June 6-8, Ohio; June 13-15, Georgia; June 15-17, Kansas; June 18-July 5, California. Firms interested in holding discussions with the Belgian businessman, contact Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77313.

2834, 2844, 2842—FRANCE—Seeks licenses to manufacture **cosmetic and cleaning products, chemical and pharmaceutical specialties.** Established 1974, firm employs 8; annual sales, $3 million. Is research laboratory for electronic, electro-chemical industries. Denis Doniat, Mgr., SORADEC, 66 rue de Ramus, 75020 Paris. Telephone, 797 30 32. P-77314.

2891, 2899—FRANCE—Seeks licenses to manufacture **caulking compounds for threaded fittings and expansion couplings and corrosion preventive coatings for pipes.** Established 1915, firm employs 176, has annual sales of $4 million, presently makes products in this field. G. E. Barthelemy, Departement Chimie, 30 rue de l'Industrie, 93000 Bobigny. Telephone: 844 60 88. P-77315.

2891, 2865, 3299—FRANCE—Seeks licenses to manufacture **adhesives, sealants for building, automotive, other industries; polymer, chemical intermediaries for carpet, paper, paint, plastic industries; noise control products for building industry.** Established 1936, company employs 36; annual sales, $3.2 million. It imports and manufactures adhesives, chemicals, intermediates, textile machinery. D. McGilvray, REVERTEX France, 6 rue de Lisbonne, 75008 Paris. Telex, 650525; telephone, 522 63 40. P-77316.

2899—FRANCE—Seeks licenses to manufacture **new pipe rust preventive coatings, systems.** Company currently manufactures, distributes such coatings; annual sales, 3.8 million francs; established 1971, has 16 employees. Firm markets in much of Europe and in Gabon. Yves Besson, Dir. Gen., Societe V. G. Anticorrosion SA, Plan de Campagne, Les Pennes Mirabeau, 13170 La Gavotte. P-77317.

3320—FRANCE—Large manufacturer of cast iron and steel for public works, shipyards, and petroleum industries seeks licensing agreements to manufacture **cast-iron or cast-steel parts, between 50 lb. and 2 tons.** Company, established 1946, employs 1,650; annual sales, $4.5 million. Gerald Despretz, Societe Generale D'Hydraulique Et De Mecanique, 8 ave. d'Iena, 75783 Paris Cedex 16. P-77318.

3321, 3561—MOROCCO — Wholly owned Government of Morocco Corporation producing electric motors, small gasoline engines for motorbikes, and diesel engines seeks joint venture arrangement to manufacture **horizontal and vertical pumps,** up to capacity of 300 cu. m. per hour, and **casting foundry** of minimum capacity of 2,000 m. t./yr. U.S. firm participation in capital, about 35/40 percent. Societe des Industries Mecaniques et Electriques de Fes, S.A., B.P. No. 41A, Fes. P-77319. OPIC.

3400—UNITED KINGDOM—Small manufacturer of fishing tackle such as reels and nets, precision engineering machined components, seeks licensing arrangement to manufacture **pumps, valves, flowmeters, trawl rope guides.** Employs 30. A. G. Cleghorn, Mng. Dir., J. S. Sharpe (Engineering) Ltd., Seaforth Road, Aberdeen AB9 2RN, Scotland. P-77320.

3400 — UNITED KINGDOM — Stainless steel fabricators, specializing in bulk milk tanks, seeks licenses to produce manufactured **items from stainless steel, preferably not cast.** Applications to food manufacturing, hospital/medical industries of particular interest. Firm requests that unit weight of item not exceed one ton. Firm, established 1960, is jointly owned by R. J. Fullwood & Bland Ltd., and DEC Int'l Inc., Madison, Wis. M. Brown, Fabdec Ltd., Grange Road, Ellesmere, Salop SY12 9DG, England. P-77321.

3433—SPAIN—Seeks licenses, technical know-how in **solar energy collectors, systems for heating homes.** Firm produces rakes, other motor vehicle parts. Plans to diversify activities. F. J. Agudo, Mktng. Advisor, Bendiberica, S.A, Balmes 243, Barcelona 6. P-77322.

3443—FRANCE—Seeks to manufacture under license and distribute any **boiler**

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. WTDR request forms may be obtained from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

work process in drying tubes, pollution control equipment, waste treatment machinery. Also interested in producing **materials handling and corn-sugar-processing equipment.** Established 1956, employs 118. Andre Barre, Mgr., Societe Lilleroise De Constructions, 44 rue d'Aire, 62190 Lillers. Telephone: 02 25 25; telex, 130 888. P-77323.

3443—GERMANY—Small manufacturer, exporter of oil separators, armatures, filters for ships seeks licensing arrangement to manufacture **oil separators** for bilge and ballastwater, as well as **sound absorbers and spark arresters** for ships' engines. Oil separators must comply with U.S. Coast Guard and IMCO Resolution A233. Dipl. Ing. Helmut Werle, Mgr., RWO Maschinenfabrik, Armatuern- und Apparatebau GmbH, Gutenbergstr. 6, 2803 Weyhe. P-77324.

3448—UNITED KINGDOM—Wholly-owned subsidiary of largest international engineering group in United Kingdom wishes to manufacture under license **metal or plastic solar panels** (collectors) for domestic heating. Company is a major manufacturer of heavy engineering products such as truck and tractor cabs, military vehicles, agricultural machinery, marine paneling, brewery equipment. Its facilities range from mass production of small components to complete manufacture of specialist vehicles. Firm has 11,500 employees. P. E. Baldrey, Product Research Mgr., GKN Sankey Ltd., P.O. Box No. 214, Hadley Castle Works, Telford, Salop TF1 4RE, England. P-77325.

3479—KOREA—Individual seeks prospective U.S. business partners in proposed $400,000 joint venture technology transfer for manufacture of **aluminum for etching.** Was previously associated with electronic manufacturer as business manager. Korean electronics industry depends on foreign supply of etched aluminum foil for use in assembling condensers. Proposed joint venture will call for import of $200,000 worth of plant equipment and continuous supply of aluminum ingot of 99.99 percent purity or up as raw material. Bok-Hwan Rhee, Kangnam Mansion, Apt. 106, 11-1, 3 KA, Dangsan-Dong, Yongdungpo-Ku, Seoul 150. Telephone: 63-7259. P-77326. OPIC.

3494—FRANCE—Distributor of refrigeration and air conditioning controls seeks licenses to produce **small steel angle and control valves, solar cells and separators for oil.** Employs 10; annual sales, $1.2 million. Good reputation. Serge Lorsery, Pres., US Refrigeration Controls, Z. I. Richardets, Nord, 42 Allee Du Closeau. 93160 Noisy Le Grand. Telex, 230311; telephone, 303 75 05. P-77328.

3500—FRANCE—Medium sized company specializing in manufacture of heavy metallic structures and equipment plans to expand its activities. Seeks licenses to make **mixing, heating, cooling tanks for chemical industry; garbage processing machinery; drying systems for ores, cereals and/or concrete; trailers; hoists, materials handling systems.** Firm's product line includes boilers, structures, chassis, components for cranes and tanks. Supplies custom-made equipment to number of industries; employs 100. Bernard Bruyas, Dir., Societe Etamoc, Ave. des Alouettes, 71300 Montceau-les-Mines. P-77329.

3500, 3600—TURKEY—Turkish Electro Mechanical Industries Corporation (TEMSAN) seeks licensing, engineering services to manufacture **electro-mechanical equipment.** Product interests include **turbines, pumps, transformers, large asynchronous motors, d.c. motors, switchgear equipment, circuit breakers, switches.** Plans call for locating plants at Diyarbakir, Malatya, Yozgat and Elazig K. Emmioglu, TEMSAN, Selanik Caddesi 27, Kizilay, Ankara. Telex: 42318 SAKMTR. Interested U.S. firms should respond to Emmioglu by May 5. P-77345. OPIC.

3519 — FRANCE — Firm seeks licensing arrangements to manufacture **opacimeters for controlling diesel vehicle pollution.** Company presently manufactures electronic instruments for gas detection. Among clients are French Navy, shipyards, nuclear energy centers, petroleum research centers. Mr. Cossu-Veillard, Dir. Commercial, Societe Icare, 128 ave. du Prado, 13268 Marseille Cedex 2. P-77330.

3524, 3711—UNITED KINGDOM—Small manufacturer of trailers wishes to manufacture under license products allied to its current production such as **lawn, garden engineering equipment, light commercial vehicles for municipal use, farm transportation items.** Company employs 15. R. K. A. Bendall, Mng. Dir., BTB (Equipment Sales) Ltd., Refuge Assurance Bldgs., Ainsworth St., Blackburn BB1 6AZ, England. P-77331.

3532 — SOUTH AFRICA — Manufacturer of rolling stock, such as friction snubbers, slack adjustors, draftgear, seeks licensing agreement to manufacture **rapid yield mine props.** Conbrako (Pty) Ltd., P.O. Box 14010, Wadeville, Germiston. Telephone, 34-3431; telex, 84731. P-77332.

3533—SOUTH AFRICA—Seeks licenses to **construct, fit offshore oil drilling rigs.** Company is one of largest construction, engineering firms in South Africa with numerous subsidiaries involved in shipbuilding, railroad locomotives, other heavy industrial work. It has offshore shipbuilding facility in Durban Harbor where it will construct drilling rigs. J. B. Walker, Production Eng., Dorman Long Vanderbijl Corporation Ltd., P.O. Box 2997, Johannesburg 2000. WTDR. P-77333.

3559—BELGIUM—Major company seeks to diversify activities through agency, assembly, joint venture or similar agreements. Firm is interested in **automation machinery, industrial robots** for use in textile, food, packaging, handling industries. Company could provide service, maintenance functions. The group, which employs about 10,000, specializes in jet engines, forgings, arms and ammunition, knitting looms, hydraulic equipment, agricultural machinery. Prepared to market in Benelux countries, Common Market, other areas. Write: Alain Rens, Dir., Industrial Section, Con. Gen. of Belgium, 50 Rockefeller Plaza, Suite 1104, New York 10020. P-77334.

3559—ITALY—Important manufacturer of paper-making equipment seeks licenses to produce **rubber processing machinery** such as mixers, calendars. Company currently produces chilled iron rolls, wear resistant parts which are essential components in rubber processing equipment. Also fabricates heavy machinery components on contract basis for leading Italian concerns. It operates well equipped plant

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate nor make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action, including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

with iron foundry, large production department turning out fabrications up to 40 t., medium-heavy duty workshop with hoisting facilities capable of handling components up to 50. Employs 980, annual sales for past 5 years averaged $30 million. Beloit Italia, S.p.A., Pinerolo. WTDR. P-77346.

3559 — UNITED KINGDOM — Manufacturer of **special purpose machinery, magnetic cylinders, jigs and fixtures and bases for printing industry** seeks licenses. Wants to make any products allied to its present line. Employs around 830, annual sales, $12 million. Is part of well known group of companies. T. Blearley, Sales Mgr., Multimatic Engineers Ltd., Oxford St., Bilston, West Midlands WV14 7DW. England. P-77335.

3579—FRANCE—Seeks licensing agreement for production of **small office equipment** for handling of paper, such as staplers, punches. Firm is importer, agent, distributor of paper cutting machines. paper shredding machines, staplers, punches, paper binding machines for use in offices, as well as printing, data departments. Company has financial ability to subcontract firms to manufacture small simple equipment for offices. Established 1958. Patrice Clementz, Asst. Mgr., E. A. Clementz et Cie, 58 rue du Marche-Gare, 67200 Strasbourg. Telephone: (88) 30.09.57, 30.05.36. P-77336.

3585—GERMANY—Seeks licenses to produce all types of **air conditioning equipment, heat pumps.** License will serve to complete firm's production program that includes boilers, furnaces, ovens. Firm is subsidiary of well known Roechling concern, which employs 45,000 in 180 enterprises. Group has excellent reputation. Roechling Metallwaren KG, Bessemerstrasse 8-12, D-8500 Nuernberg. P-77337.

3585 — UNITED KINGDOM — Seeks license to manufacture **warm air heating, air conditioning, ventilation, filtration equipment.** Presently makes gas and oil fired air heaters. Recently moved to larger, modern plant. Exports to EFTA and Common Market. Employs 110; has sales force of 17. Combat Engineering Ltd., Oxford St., Bilston, West Midlands WV14 7EG, England. P-77338.

3592, 3714 — MOROCCO — Newly established firm, specializing in production of all types of filters and strainers for gasoline and diesel engines, seeks licensing and/or joint venture arrangements for production of **pistons, and auto parts such as carburetors, shock absorbers, spotlights, handles.** Company has existing plant in production. Moroccan market projects increased need for diesel engines. Ismaili Moulay Oriss, Pres., Societe de Fabrication de Filtres, S.A., SOFIMAR, 36, rue Emir Abdelkader, Meknes. P-77339. OPIC.

3652—INDIA—Leading producer of consumer plastic wares seeks joint venture to manufacture **C-O assembled cassette blanks** at Santa Cruz Electronic Export Processing Zone (Bombay). Initial plans call for annual production of 6 million sets of C-O blanks with leader tape, cassette housing, molded windows, roller and hubs to be assembled into complete unit except for main tape. Project provides for inclusion of main tape later. Indian firm has completed all arrangements to begin venture. Possesses plant, equipment to produce blanks. Already producing blanks in its existing facility for domestic market. I. G. Advani, Mktng. Officer (Technical), Bright Bros. Ltd. (BBL), 156-A J. Dadajee Road, Tardeo, Bombay 400 034. P-77340. OPIC.

3679—UNITED KINGDOM—Large firm seeks license or similar arrangement to produce **power supplies, electronic components, solenoids, similar devices.** Firm makes transformers, coils, solenoids, electronic controls. Employs 581; annual sales, $6 million. J. J. Hayes, Mktng. Sales Dir., Parmeko Ltd., Percy Road, Leicester LE2 8FT, England. P-77341.

3841—FRANCE—Manufacturer, importer, distributor, exporter of **veterinary instruments, animal breeding and handling instruments, instruments for animal care,** seeks licensing agreements for similar items. Employs 50. J. P. Hoepfner, Commercial Mgr., Indentix-Hauptner, Ernolsheim-les-Saverne, F 67330 Bouxwiller. Telex, 890582; telephone, (88) 70.00.43. P-77342.

3842 — GERMANY — Seeks exclusive licensing arrangement for manufacture of **medical, biomedical equipment and disposables**—for example, syringes, medical tubes. Firm is manufacturer, distributor, importer, exporter of medical supplies, equipment, instruments. Bwald Rose, Rose KG, Zurmaienerstrasse 30, D-5500 Trier. P-77343.

Investors Sought For Dakar Industrial Free Zone

Senegal has established the Dakar Industrial Free Zone to attract foreign investors to set up industries which are labor-intensive and manufacture goods for export. Plants producing furniture, toys, electronic products, food products, machinery and textiles are particularly suited for the area. Contact is also sought with engineering companies.

The Zone, 13 kilometers from Dakar, the capital city, offers attractive incentives to investors. Such incentives include total fiscal exemptions, freedom to transfer invested capital and income, freedom to recruit local and expatriate staff, and assistance and services in getting projects under way.

Louis Alexandrenne, Senegal's Minister of Industrial Development, will be in the United States beginning May 22 to promote the Zone and hold discussions with American firms interested in establishing there. For additional information contact Mary C. Inoussa, Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. Telephone: 202-377-3786 or 377-4065. P-77359.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Domestic Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-377-5361), referring to file number.

Joint venture

GERMANY—Sign manufacturing, screen printing. Company interested in establishing joint ventures and/or acquiring financial interest in existing U.S. firm. Annual sales, DM 11 million. Financial refs.: Landeszentralbank, Stadtsparkasse, both in 4350 Recklinghausen. Contact: Herr Trautwein, Trautwein KG, Postfact 1609, Blitzkuhlenstr. 100; D-4350 Recklinghausen; File 3351.

GERMANY—Electrical measuring, regulating instruments. Company seeks association with U.S. firm equipped to manufacture and distribute similar products. Gossen GmbH, D-8520 Erlangen, Nagelsbachstrabe 25, P.O.B. 1780. File 3352.

GERMANY—Building chemicals, materials, related products. Company seeks licenses, joint ventures. Manfred Graeff, Mgr., Alsecco Bauchemische Produkte GmbH KG, D-6444 Richelsdorf-Wildeck, nr. Kassel. File 3353.

GERMANY—Display, storage, materials handling systems for use in supermarkets, restaurants, shops, recreational centers. Company offers, seeks joint venture, licensing opportunities. Rolf Herbst, Owner-Mgr., Metallwarenfabrik Konrad Herbst, Ink. Rolf Herbst GmbH, Warthestr. 2, D-3570 Stadtollendorf. File 3354.

GERMANY—Mine railway and monrail systems. Company seeks production of its specially designed equipment on joint venture and/or licensing basis. Annual sales, DM 50 million. Horst Mahlkemper, Maschinenfabrik Scharf GmbH, Postfach 704, 4700 Hamm. File 3355.

GERMANY—Stainless steel and acid-proof standard and industrial fasteners. Company desires joint venture and/or licensing arrangement with U.S. firm for standard industrial fasteners according to metric DIN-ISO norms. Annual sales, DM 4 million. Walter Kersting, owner, Walter Schulte KG, Schraubenund Metallwarenfabrik, Postfach 1307, Industriestr. 3, D-4700 Hamm-Heessen. File 3356.

Licensing

AUSTRALIA—Irrigation sprinklers for commercial application. Capacity 27,000 to 140,000 liters per hr. Company claims low cost, light labor requirements as two important features. Nu Sp-ay Industries, 120 Colchester St., South Brisbane, 4101, Queensland. File 3358.

AUSTRIA—"Classic" aluminum radiators with anodized surface offering heating system reportedly both aesthetic and functional. ID-Elementebau Ges.m.b.h. KG, Salzburger Str. 26, A-6380 St. Johann in Tirol. File 3357.

BELGIUM — Municipal and industrial sewage treatment. Company offers to design, construct, and commission equipment and turn-key projects. Jean Hendrick, Seghers Engineering N.V., Genevestraat 4, P.O. Box 14, Brussels. File 3359.

FRANCE—Continuous rotative cooker-cooler with hydraulic conveyor. Annual sales, $4 million. Fernand Hanau, Gen. Mgr., 75 rue du Faubourg Saint Marten, 75010 Paris. File 3364.

FRANCE—Energy saving devices installable on heating systems for homes, buildings. Programmable calculator-controller integrating factors affecting temperature. Gamba, Gen. Mgr., Societe Enereco, 17 rue Ponsard, 38100 Grenoble. File 3363.

GERMANY—Check-out counters, conveying systems for self-service stores. Herr van Dinther; Werner Potrafke; Spezialfabrik fuer Kassentische und Foerderanlagen; Postfach 330; Hufeisenstr. 6-10, 4320 Hattingen. File 3371.

GERMANY—Concrete-asbestos pipe-cut-

ting machine. Also used for cutting plastics, earthenware, cast iron, steel. Time saving, light weight, low output of polluting substances. Bodo H. Habel, Mgr. Hadres Werkzeugfabrik Bodo H. Habel, Morchfeldstr. 24, D-6800 Mannheim 1. File 3372.

GERMANY — Holster-type belt-mounted purse for use with jeans by both sexes. Carries personal items and may be worn on either side. B. Belopavlic, Poststr. 2, 5000 Koeln 1. File 3366.

GERMANY — Medical/biomedical equipment, disposables. Company is particularly interested in licensing arrangement for heart-sound microphones; disposable vaginal speculum; disposable blood sedimentation tubes. Ewald Rose, Rose KG, Zurmanienerstr. 30, D-5500 Trier. File 3360.

GERMANY—Spark plug tightener. Features better compression, lower gasoline consumption, security in mounting, sparing of the cylinder heads. Herr Wessel, Export Mgr., Fritz Kuelzer GmbH, L 11,10, D-6800 Mannheim 1. File 3373.

GERMANY—Water saving toilet flush. Alois Schneider, Post Stoedtlen, D-7091 Birkenzell. File 3365.

SWEDEN—Combi-Roll & rollpaper easel. Designed for copying on rollpaper, used in combination with enlarging apparatus, consists of two units. Jan Esberg, AB Gitson-Systems, Box 43073, S-100 72 Stockholm. File 3361.

SWITZERLAND — Electro-hydraulically operated household and commercial garbage compactors. Small enough to fit into kitchen cabinet, garbage compacted to one-fifth original volume; pressing force 1.8 m. t. Hans Bachmann Maschinenfabrik, Zeughausstr. 12, CH-5600 Lenzburg. File 3369.

SWITZERLAND — Pulsating combustion burner and chamber for industrial use and in domestic water boilers and heating systems. Company reports substantially reduced fuel consumption, increased heat output. L. Odman, Mercury Accountants Ltd., 8 Ave. de Frontenex, 1207 Geneva. File 3370.

SWITZERLAND—"Push-on handle" tool used in handling printed circuit boards in electronics production. Company claims handles are secured automatically; no adhesives or screws necessary. NPM AG, Buebenloostr. 22b, 9500 Wil. File 3367.

SWITZERLAND—"Re Bo" cuts, folds, punches holes, bends metal strips and plastics into desired shapes. Used by hobbyists and as educational toy. Re Bo, Pierre Bornand, Ave. de la Croisette, 1205 Geneva. File 3368.

SWITZERLAND — Table soccer game. Game can be played by 2 to 6 players; field players can turn 360 degrees and kick ball in all directions. Working prototype available. J. Deutsch, Riedhofstr. 253, CH-8049 Zurich. File 3362.

The following trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Program, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest indicated by codes 0111-1799 and 4011-8999 are based on the Standard Industrial Classification Manual, 1972; codes 20 through 39 come from Numerical List of Manufactured Products (New 1972 SIC Basis), MC72-1,2. Codes beginning with 99 are from the TOP coding system.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Department's Export Administration Regulations. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Miscellaneous metal ores

1099—INDIA—One thousand m. t. antimony ore. Kalyan Asso. making this inquiry on behalf of customers. American suppliers requested to send quotations to Kalyan. Reply to—A. G. Amin, Commercial Mgr., Kalyan Asso., 4-3-632 Tilak Road, Ramkote, Hyderabad 500001. Cable AMINFILE; tel 53066. Ref. Letter "KA/572/77."

General building contractors

• **1541—ALGERIA**—Economic and feasibility study for project for production of civilian and professional leather clothing. Tender document in French costs $12.05. Offer and correspondence in French required. All specifications metric. Reply to SONIPEC, 100 Rue De Tripoli, Hussein-Dey, Algiers. Cable TAL AGER; Telex 52832.

Heavy construction

• **1620—JORDAN** — Jordan Electricity Authority (JEA) has applied to Arab Funds (Arab Fund for Economic & Social Development, Kuwait Fund for Arab Economic Development & The Saudi Fund for Development) for financing installation of two 66 MW steam turbine-generating units, Nos. 4 & 5, stage III, all required auxiliaries which are expected to be commercially operable on Nov. 1, 1980 (Unit No. 4) and May 1, 1981 (Unit No. 5) at Hussein Thermal Power Station. Stage 1 is presently near completion and consists of a two 33-MW unit installation to be operational by May. Stage II is presently being implemented and consists of a 33 MW-unit installation to be operational by Aug. 15, 1978. Stage III consists of extending facilities under construction to include necessary civil works and electro-mechanical equipment required for the new two 66-MW steam unit installation. In general, works under Stage III shall consist of manufacture, supply, fabrication, transportation, installation and testing of all mechanical equipment for the boiler house side of installation, including boiler, all associated pumps, control equipment, necessary piping and storage tanks; all mechanical equipment for the turbine room side of installation, including turbo-generator, all associated pumps, control equipment and necessary piping. Also, air-cooled condenser including all auxiliary fans and necessary piping; all necessary electrical equipment, including transformers, switchgear, control centers, wiring, conduit, trays, lighting fixtures, intercommunication equipment, misc. starters and switches, etc.; all required equipment and materials for reinforced concrete extension to power house and auxiliary boiler house. In addition, foundations for building and equipment, all hardware, plumbing, airconditioning and ventilating facilities, roadwork, excavation and grading. Bidding documents available for non-returnable fee of $500 (167 JD) payable to Kuljian Corp. or Jordan Electricity Authority. Bidders interested in receiving documents should write to Engineer, The Kuljian Corp., 3624 Science Center, Philadelphia, Pa. 19104, Attn: E. H. McLatchy; or to Dir. Gen., Jordan Electricity Authority, P.O. Box 2310, Amman. Bids will be due on Aug. 1. One set of bidding documents will be available at addresses listed above for reference by interested bidders, prior to purchase.

Converted paper, paperboard products

• **2642000—ZAMBIA** — Government invites bids for supply of buff manila envelopes in varying sizes and quantities. Prices must be quoted in Zambian currency and forwarded to Government Stores Department, Lusaka. Bid deadline May 20. Tender documents containing specifications available from U.S. Department of Commerce, Construction and Forest Products Division, Room 2120, Washington, D.C. 20230, 202-377-3530.

Perfumes, toiletries

2844000—EGYPT—Misr Import Export Co. requires offers on supplies of perfumes, cosmetics, toilet preparations, manicures and pedicures. Farouk Fahmy, Misr Import Export Co., 5-26th of July Street, Cairo; Cable—TOIRMIQUE CAIRO; Telephone 939488; telex 2244 TOIRMIQUE UN.

Chemical products

2869000—PORTUGAL — Vinyl chloride resin stabilizers and secondary plasticizers such as complexes of strontium and zinc; laurates, myristates, laurate stearate, and mercaptides of barium, cadmium, and zinc. Sales potential for these products estimated at about 25,000,000 escudos per year. Reply to Ferreira Da Silva, Dir., Rolim Comercial, SARL, Largo Vitorino Damasio, 3 Lisbon 2. Large commercial enterprise distributing industrial and construction machinery and raw materials. Banking and trade references report favorably on this firm.

Fabricated rubber products

3069711—LIBERIA — Douche bag sets Dir. sale (resale), excl. distr. Medium-sized Indian-owned firm operating 3 drugstores in Monrovia desires above. Sales potential good. Desires literature & prices c.i.f. Monrovia ASAP. WTDR 10-75. Reply to—H. D. Mohan, Mng. Dir., Mohan's Medical, Randall St., P.O. Box 1080, Monrovia. Cable MOHANDRUG; Phone 21824 & 21304.

Iron & steel products

• **3310000—INDONESIA**—Supply of fabricated steel for two 200-MW thermal power plants. Bid deadline May 17. Perusahaanumum Listrik Negara, Jakarta. Tender documents available from Black & Veatch International, 1500 Meadow Lake Parkway, Kansas City, Mo. 64114 at $40.

Construction, mining, materials handling machinery, equipment

• **3535000—TURKEY**—Denizcilik Bankasi T.A.O., Satinalma Kurulu Baskanligi, Yolcu Salonu Kat 1, Enquiry No. 977/3013, Karakoy, Istanbul, requests bids on 3 diesel-driven, portable pneumatic transport devices. Minimum suction depth and blowing distance: 25 meters to transport grains with 0.70-0.80 KG per cubic decimeter density. Capacity: 88 tons/hr. Maximum weight exluding suction and blowing equipment: 5 tons. To be mounted on chassis with inflated tires and pulling/lifting apparatus. Spare parts required for 2 years (on 300 single-shift days per year basis). Proforma invoices in 15 copies. 90-day option for purchaser (Turkish Maritime Bank) as of bid deadline. Payment by L/C. Bid #977 /3013 with deadline of May 23.

Metalworking machinery

3546261—PORTUGAL — Power actuated chain saws. Dir. sale & rep. Large partnership of various firms & technicians with experience in agriculture & livestock fields. Has 2 plants for production of animal feeds & will soon start formulation of agric. & domestic pesticides. Commercial import & distribution dept. will handle agric. machinery, veterinarian's equip. & supplies & raw materials for partner firms & own industrial sector. Registered capital 2,750,000 escudos. Local banking refs. report firm's partners enjoy good reputation but firm's credit rating not developed because of its recent establishment. Reply by fastest means to—Silverio Pereira Jones, Comm. Dir., Incomape, Ind. E Com. Para Agricultura e Pecuaria, Lta., Rua Visconde de Seabra 4-5 Esq., Lisbon 5. Telex 12243 EDKATZ P; tel 779355. Co. ref. EG 87/77.

Special industrial machinery

3550000—JORDAN—Local firm wishes to establish small factory for manufacturing domestic insecticides. Needs high insecticidal perfumed concentrate to mix with local kerosene in 1:250 ratio. Liquid will be marketed in 500cc plastic containers. Export opportunities exist. Contact Raoud Salfiti, Salfiti Medical Store, P.O. Box 477, Amman. Firms may also wish to contact Andras F. Behr, BIC/CAGNE, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-4441.

3550000—JORDAN — Machinery sought for production of 5,000 tons/year of glassfiber continuous filament for manufacture of glassfiber textiles. Catalogs and literature required along with estimated cost per machine when possible. Indication of delivery time preferred. Prompt response by U.S. firms will be given priority. Contact Project Engineer, Pension Fund, P.O. Box 3294, Amman, Telex: 1549 JFI JO, telephone: 41032.

3559300—ZAMBIA — Supply of plastics machinery for manufacture of plastic sheeting, bottles, bottle caps, ballpen covers, suitcases, etc. No fixed deadline. Interested suppliers should write A. D. J. Parmar, Dir., Parmar S. Parlour, 803 Freedom Way, P.O. Box 854, Lusaka. Firm is men's fashion center.

General industrial machinery

• **3560000—INDONESIA** — Motor pump sets for water production wells for ground water development project financed under IBRD Loan Number 1100-Ind. Tender No. IDA-04/GWD/77; bid deadline May 31. Ir. Suyono Sosrodarsono, Dir. Gen., Directorate General of Water Resources Development, Direktorat Peralatan Pengairan, Room No. 338, Jalan Pattimura No. 20, Kebayaran Baru, Jakarta Selatan. Copy of tender document available from above address.

• **3569000—INDIA**—One helium liquifier unit with purification and recovery system for use in variable energy cyclotrone project at Calcutta. Reply to: E. Y. Kalimuddin, Asst. Purchase Officer, Dept. of Atomic Energy, Directorate of Purchase and Stores, Central Purchase Unit, 3rd Floor, Mohatta Bldg., Palton Rd., Bombay 400 001. Tender documents available from above address and, when received, for inspection or borrowing at Transportation and Capital Equipment Division, Room 2812, Main Commerce Building; 202-377-5593.

Service industry machines

3587173—HAITI — Icemaking machinery. Establishing ice plant to service Port-au-Prince metropolitan area. Reply to Guy Malary, Owner, P.O. Box 2518, Port-au-Prince; Tel: 2-3724.

3599498—GERMANY — Oil filters for large engines. Firm distributes filters & similar products. Fin. ref: Bank Fuer Gemeinwirtschaft, 4400 Muenster. Reply by fastest means to—Herr Karlheinz Westhues, Duesbergweg 67A, 4400 Muenster. Tel: 0251/76991.

Communications equipment

• **3662000—INDIA** — Director General, Posts & Telegraphs, MMD Section, Parliament St., New Delhi 110001, has issued tender number 12-213-77-MMD for supply of 12 radio telephone terminals. Bid deadline June 8. Copy of specifications available from Asst. Dir. General (Imports), Room 514, P&T Directorate, New Delhi, for US $2.74.

Engineering, laboratory, scientific research instruments

• **3811000—INDIA** — Director General, Post and Telegraphs, MMD Section, Parliament St., New Delhi 110001, has issued tender number 12-144/76 MMD for supply of 25 level measuring sets, 22 wave form generators, 22 wave form monitors, and 27 wave noise meters. Bid deadline June 6. Copy of specifications available from above address or Supply Wing, Embassy of India, 2536 Mass. Ave., NW., Washington, D.C. 20008.

Measuring & controlling devices

3829295—GERMANY — Electronic pressure transducers. Estab. 1908. Employs 40. Bank reference: Dresdner Bank AG Wuppertal Elberfeld. Reply by fastest means to—Herr Havemann, A. M. Erichsen Wuppertal GmbH, Wittensteinstr. 53, 5600 Wuppertal. Cable ERICHSEN; tel. 02121-83060; tx 8591631.

3829429—BELGIUM — Measurement & control devices using beta, gamma or neutron gauge technology. Private laboratory which works under contract for highway builders, government & universities. Estab. 1950, employs 120. Laboratory plant located in suburb of Brussels. Reply to—Jean-Marie Desmet, Centre de Recherche Routieres, Boulevard de Lqa Woluwe, 1200 Brussels. Tel. 02/767.51.11.

Special product groups

9950—JAPAN—Craft items for young

TOP Bulletin

A recently established activity of the Commerce Department Trade Opportunities Program, the "TOP Bulletin —An Advisory Service," is designed to assist U.S. exporters and export service organizations.

The Bulletin provides a weekly compilation and index of all trade opportunities processed in the Commerce program. It is offered on an annual subscription basis, at a fee of $100 per year, through the Commerce District Offices.

The Bulletin supplements, rather than replaces, the TOP Notice Service, under which subscribers receive trade opportunities in the specific industrial, commodity or service field of direct interest to them. It is aimed at manufacturers with a wide range of goods or services that desire a consolidated export trade lead source; at export management firms that handle a large variety of products or services; at banks, port authorities, chambers of commerce and other trade development agencies interested in international business information; and at export service organizations, such as shippers, freight forwarders, and engineering and consulting firms.

The trade opportunities generated by Commercial Officers at U.S. Embassies and Consulates around the world thus reach U.S. enterprises in four ways; through the TOP Notice Service, in the pages of *Commerce America* and *Commerce Business Daily*, and in the TOP Bulletin.

girls. Interested in high price range items. Est. annual purchase $100,000. Old-established exporter/importer of general merchandise. Capital $333,000. Annual sales $100 million. Ref.: Kawaramachi Br., Sanwa Bank, Osaka. Reply to—Tadasu Masutani, Buying Div. 2-3, T. Chatani & Co., Ltd., 68 Higashi-Shimizu-Machi, Minami-ku, Osaka 542. Cable CHATANICO OSAKA; tel 06-271-2101; telex J63364 CHATAN.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Broad woven fabric mills, cotton

2211407—MOROCCO—Blue denim, 13¾ or 14¼ oz. per sq. yard. Quantity requested: 100,000 meters. Specializes in supply of various materials to garment manufacturers. Seeks U.S. producers of blue denim for exclusive representation. Reply to—Herve de Nonancourt, Denelk Maroc, 42 Ave. Des F.A.R., Casablanca. Phone: 25-17-30. Excl. agency & distr.

Knitting mills, products

2258439—ITALY—Mosquito netting made of synthetic fibers. Prospect is long-established, thriving firm specializing in manufacture of plastics products. Also acts as wholesaler, importer, exporter of wall-to-wall carpets and other furnishings, mainly made of synthetic materials. Has extensive but insufficiently utilized sales network (30 persons altogether), covering Italy, Belgium, France, Middle East & some African countries. Annual sales volume approx. $5 million. Excl. distr. Contact—Oreste Tirante, Export Mgr., Tirante Angelo and C., Via Casteldelfino 79, 10147 Torino. Cable TIRANPLAST TRINO, tel 011/2163444.

Chemical products

2899541—PAKISTAN — Drilling mud. Sales potential $5 million. Medium-size importer & sales indent agent of gas compressors, petroleum refinery equip., drilling machines, cranes-overhead travel, oil field machinery, oil pressure gauges & oil storage tanks. Interested seeking long-term agency arrangements with U.S. principals on excl. basis. Marketing territory all Pakistan. Company's mng. dir., qualified professional engineer, retired senior executive of large British oil distributing co. in Karachi & claims very good contacts in govt. agencies responsible for procurement of machinery & equip. Claims annual sales at $2 million. Employs 7 incl. 2 salesmen & 2 tech. personnel. Reply to Syed Nurul Hussainn, Mng. Dir., Nuricon Union Ltd., 4th floor, Mubarak Manzil, 39 Garden Rd., Karachi, Cable NURUNION KARACHI; Tel. 73334.

Pottery, related products

3262014—EGYPT—Tableware, tea sets & dinnerware trays made of porcelain & china. Value of L. E. 150,000 pounds (U.S. $214,500). Govt. tender no. 17/77; due date April 27. Import & Export Co., although public sector company, authorized to act in private capacity when representing foreign firms. Fahmy seeks offer by telex, both f.o.b. & c.i.f. Alexandria, which includes 5 percent commercial commission. Prices quoted based on incentive rate (U.S. $1—L.E. 0.70). Telex—Farouk Fahmy, Misr Import Export Co., 5-26th of July St., Cairo. Cable TOIRMIQUE CAIRO; tel. 939488, telex 2244 TOIRMIQUE UN.

Special industry machines

3559589—INDONESIA — Pharmaceutical machinery. Payment to be funded by L/C. Requests catalogs c.i.f. Jakarta price quotations for above. WTDR 2/77. Reply to Lumbangaol Sh., President, N. V. Indonesian Drug House, Jalan Cikini Raya 88, Jakarta Pusat. Tel 44946, 43143.

Communications equipment

3661254—KOREA — Electronic teletypewriters (teleprinters), DOT metric system, latest model. 1977 sales target—200 or more. Seeks price quotations, catalogs, operation manual & delivery terms along with proposal for distributorship. If terms are right, firm plans to place trial order for 1 unit immediately. Also plans to convert machine to print bilingual alphabets, English & Korean, with mfrs. authorization. Firm reported in 1976 successfully developed keyboard for U.S. conventional teletypewriter to print both English & Korean alphabets, & this product now ready for market. Reportedly is sole co. in Korea in its line of business. Firm is affiliate of well-known Kong Typewriter Co., Ltd., in Korea, estab. 1973. Has 47 employees incl. 6 salesmen. WTDR upon request. Requests excl. distr. Reply by fastest means to—Kyung-Whan Ya, Mng. Dir., Kong Teletypewriter Industrial Co., Ltd., 126-1, Yegwan- dong, Chung-ku, Seoul 100. Tel. 21-7166-8.

3662320—PAKISTAN — Marshalling & signalling equip. for railways. Sales potential $10 million approx. Medium-size importer & sales indent agent of gas compressors, petroleum refinery equip., drilling machines, cranes-overhead travel, oil field machinery, oil pressure gauges & oil storage tanks. Interested seeking long-term agency arrangements with U.S. principals on exclu. basis. Marketing territory all Pakistan. Company's mng. dir., qualified professional engineer, retired senior executive of large British oil distributing co. in Karachi & claims very good contacts in govt. agencies responsible for procurement of machinery & equip. Claims annual sales at $2 million. Employs 7 incl. 2 salesmen & 2 tech. personnel. Reply to Syed Nurul Hussainn, Mng. Dir., Nuricon Union Ltd., 4th floor, Mubarak Manzil, 39 Garden Rd., Karachi. Cable NURUNION KARACHI; Tel 73334.

3662413—NORWAY — Dynamic positioning equip. for offshore drilling platforms. Estab. 1910. Electro Engineers, mfgrs. & distrib. of electronic equip. for ships & traffic signals. Distributors of subsea offshore TV equipment, also high voltage equip. 320 employees. Manager will be visiting OTC, Houston, May 2-5, & wishes negotiate with interested U.S. firms. Address in Houston, Holiday Inn Downtown. Write, call or telex—Torstein Gamre, Mgr., Sonnico A/S, Malerhaugveien 25, Oslo 6. Tel. 02-193100. Ref. Den Norske Creditbank, Oslo.

3662622—GERMANY — Ultrasonic cleaners. Important distr. of equip. for laundry & drycleaning shops & plants, has recently enlarged line, adding other cleaning machinery & equip. Has 38 employees and annual volume about dm 7.8 million. Has good reputation, sound financial standing & no derogatory info received. Experienced in importing from U.S. Reply by fastest means to—Wolfgang Hantke, Norge Reinigung und Klimatechnik Vertriebs GmbH, Nieder-Ramstaedter Strasse 49, D-6100 Darmstadt. Telex 419 479; tel 06161-48026.

Instruments for measurement, analysis and control

3823080—GERMANY — Encoders, shaft angle. Small mfr. & distrib. of industrial tachometers & related equip. & devices. Estab. 1968, 12 employees. Reply to—Manfred Esters, Pres., Esters Elektronik GmbH, Am Rueckersgraben 25, 6054 Rodgau 2. Tel. 06106-2997; telex 4 17 870.

Miscellaneous manufacturing industries

3999998—FRANCE—Litter for cats made of argil. Estab. 1976, capitalized at 1,000,000 francs. Importer, distr. of pet & livestock food. Marketing territory France. Payments regular. Good reputation. Bank ref: Credit Lyonnais, 95300 Pontoise. Reply to—A. Viguier, Mgr., Expand, 95450 Vigny. Telex 600726; phone 466-2282.

Visiting Buyers & Officials

NIGERIA—General manager of major import firm will be in United States for three weeks in June. Firm carries only small line of American goods, is now interested in meeting manufacturers in following areas: **beer, tiles for floors and ceilings, folding furniture, camping equipment, inexpensive cameras, alarm and wall-clocks, inexpensive ball point pens, writing chalk, notebooks, and hand-powered agricultural equipment.** New import regulations are expected that may make this market more accessible. For further information, contact: Peter B. Alois, Room 2322, U.S. Department of Commerce, Washington, D.C. 20230; 202-377-3265.

SWEDEN—Two managers from a major manufacturer of parquet flooring and doors will be in the United States May 2-15. They are interested in diversifying product lines, and seek exclusive agencies in Sweden for following product areas: **do-it-yourself building materials and tools; home decorating products and tools; insulating kits; smoke detectors; home energy-efficient products; sporting goods; garden implements; electronic T.V. games; and other products.** For further information contact Peter B. Alois, U.S. Department of Commerce, Foreign Buyer Program, Room 2322, Washington, D.C. 20230, 202-377-3265.

AUSTRALIA — Businessman visiting the U.S. in early May seeks contact with manufacturers of **perfumes and high quality toiletries.** Contact Jim Nader, U.S. Department of Commerce, Foreign Buyer Program, Room 2322, Washington, D.C. 20230, 202-377-3265.

BENIN—Daniel Agbo-Panzo, Gen. Mgr.

for Industrial Products, The Agbo-Panzo S.A. Group of Companies, Cotonou, Benin (Dahomey), will visit the United States to purchase **building materials, hardware items, and airconditioning equipment** suitable for use in his country's hot and humid climate. Would like to meet with American firms to discuss potential business relationships such as joint ventures, manufacturing under license, agency representation and distributorships, and direct export sales. Would prefer business arrangements in which American products could be assembled or manufactured by his companies in Africa. Currently manufactures and distributes building materials, paint, home furnishings, lawn furniture, hardware, and chemicals. Contact Bill Corfitzen, Foreign Buyer Program, Room 2322, U.S. Department of Commerce, Washington, D.C. 20230; 202-377-2068.

AUSTRALIA—George E. Wallace of Melbourne is seeking contact with U.S. manufacturers of **typewriters, check writers, duplicators, calculators, carbons and typewriter ribbons.** He is interested in becoming an Australian distributor. For further information contact Theresa E. Rettig, Room 2322, U.S. Department of Commerce, Foreign Buyer Program, Washington, D.C. 20230; 202-377-3265.

Future Construction Abroad

SAUDI ARABIA—Firm wishes to form joint venture with U.S. firm in construction of approx. **500 houses, including installation of infrastructure along with support and recreational facilities.** Saudi firm will do site preparation. Some prefab, some permanent concrete desired. U.S. partner will be expected to provide 75 percent of equity. Contact ASAP Omar Sultan, 3009 Valley Oak Dr., Loveland, Colo. 80537, telephone: 303-667-8374 and 303-667-4615, telex: 910-903-9028 DTI LVLD.

MALAYSIA—Contractors invited to apply for registration for construction of **Muar Water Supply** in Johore. State government has received loan from Asian Development Bank in various currencies towards cost of first stage, which will produce 8 million gal. per day. Raw water will be pumped via concrete-lined steel pipeline from Muar River to treatment plant 4 miles away. Treated water will then flow by gravity through concrete-lined steel pipeline to 2.5 million-gal. terminal reservoir. From there water sent directly into reticulation system. First stage expected to be completed by 1980 and will be executed under 7 contracts. Contract No. 1—supply, delivery, erection and commissioning of water treatment plant equip., raw water pumping plant equip., electrical equip., fittings & ancillary works. Contract No. 2—supply, delivery, installation and commissioning of booster pump sets & auxiliary works at booster pumping station. Contract No. 3—supply and delivery of 28.7 in. - 28.1 in. O.D. steel pipes & specials. Contract No. 4—supply and delivery of 12 in. & 15 in. dia. class 'B' A.C. pipes. Contract No. 5—supply and delivery of sluice & air valves. Contract No. 6—construction of 8.0 m.g.d. treatment plant, raw water intake, raw water pumping station, 2.5 m.g. terminal reservoir and booster pumping station. Contract No. 7—laying and jointing of 28.7 in. (length 81,000 ft.) and 28.1 in. (length 15,000 ft.) outside dia. steel pipes and 12 in. (length 16,400 ft.) and 15 in. (length 15,200 ft.) dia. class 'B' A.C. pipes and ancillary works. Applicants can apply to be registered for one or more of contracts. Contractors interested in receiving prequalification documents forward applications to Dir., Public Works Dept., Johore, P.O. Box 709, Ohore Bahru, Malaysia. Prequalification deadline June 14.

MALAYSIA—Government invites contractors to apply for prequalification to tender for **structural steel and cladding associated with construction of new power station** with 2x120 MW units at Pasir Gudang in State of Johore. Contract includes supply, fabrication and erection of structural steel for main plant building and supply and erection of asbestos sheetings for roof and side cladding. Main plant building housing turbine and boiler shall be portal frame construction. About 4000 tons of steel supply, fabrication and erection involved. All steel sections shall conform to British Standards, cladding required to cover surface area of nearly 2,800 sq. meters. Prequalification documents available from Deputy Gen. Mgr. (Planning & Construction), National Electricity Board, 129 Jalan Bangsar, P.O. Box 1003, Kuala Lumpur, on payment of M$50 only by check drawn in favor of TATA Consulting Engineers. (U.S. $1.00 = approx. M$2.50). Refer to Contract No. 24/76/3. Prequalification deadline for this opportunity June 1.

The Overseas Private Investment Corp. (OPIC) offers political risk insurance ~~ assets and bank guaranties to U.S. construction and service firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's contract insurance programs, write Construction Insurance Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-7825.

NIGERIA — Secretary, Kaduna State Water Board, P.M.B. 2133, Kaduna, issues tender to contractors registered with Kaduna State Water Board or with Federal Government in equivalent category for supply and erection of **water treatment plant and equipment.** Tenderers requested to report to Office of Secretary, Kaduna State Water Board Hqs., Kaduna, to obtain official tender documents prior to submitting offers. Tenderers required to deposit non-refundable fee of N500 (U.S. $800) with Chief Accountant, Kaduna State Water Board in Kaduna. Completed tender documents must be returned in sealed envelope clearly marked "confidential—tenders for supply and erection of water treatment plant and equipment, Kaduna Water Supply Extensions" at top left hand corner. Tenderers also required to include in tender a photostat copy of registration certificate. Refer to Bid No. KSWB/2/76-77. Bid deadline for this tender May 31.

JORDAN—King Hussein Medical Center has announced tender for purchase, installation and testing of **hospital equipment and furnishings** for Farah Royal Jordanian Rehabilitation Center, King Hussein Medical Center, Amman. Includes training of personnel to operate equipment. Bid documents—specifications and drawings—may be obtained from: Office of Military Work, General Headquarters, Jordan Armed Forces, Amman, telex: 925 1200; or from: Heery International Ltd./Arabtech, 880 West Peachtree St., NW., Atlanta, Ga. 30309; telex: 542165. Specifications for total package cost $150 or JD50; specs for furnishings only are $90 or JD20. Documents can be reviewed in offices of Military Work and Heery International and must be purchased by April 30. Bids must be received by July 11. OPIC.

MALAYSIA—Penang Port Commission, P.O. Box 143, Penang, invites tenders for design, supply, fabrication, and installation of **steel roll-on, roll-off ramp and link span** approx. 90 by 27 feet complete with lifting beam, gantry, winch, and hoisting mechanism, warning signals, and associated electrical works. Bid documents available from port commission for M$500 (about U.S. $200), and bid guarantee of M$10,000 required with submission. Deadline June 6. Financed in part by Asian Development Bank loan. OPIC.

THAILAND — Contractors interested in prequalifying to bid on construction of **Sathorn Bridge project** submit brochures and other relevant documents with detailed background information, latest balance sheet, other financial details, and past experience on similar projects to Director General, Department of Public Works, 2 Larnluang Rd., Bangkok, by May 23. Foreign firms must join with Thai contractors and submissions from joint ventures should be submitted under one cover. Bridge is to be prestressed concrete, hollow box superstructure with 6 traffic lanes to be constructed as twin bridges. Space will be left in between for future mass transit structure. Main bridges will have total length of 1200 meters with 3 spans across the river and seven approach spans on either side. Also included is improvement of 3.3 km. of Sathorn Road to 6 traffic and 2 parking lanes and 1.9 kms. of Thonburi Road to join Taksin and Charoen Nakorn Roads with 3 traffic lanes, emergency lane and median. OPIC.

SUDAN—Tenders will be invited in August for construction of a major **asphalt-paved trunk road** approx. 250 km. length along Blue Nile from Sennar to Damazin, and a 50 km. **branch road to Gerabin.** Will be financed by Government of Sudan and loan provided jointly by Arab Fund for Economic & Social Development and Kuwait Fund for Arab Economic Development. Roads and Bridges Public Corp. requests international road construction contractors interested in execution of these works to furnish information required on "Contractor Prequalification Data Sheet" which may be obtained through offices of Consultants to Corp.

Contractors who in opinion of Roads and Bridges Public Corp. are qualified to undertake work of such magnitude will subsequently be invited to collect tender documents during August for submittal of tenders at end of October. Construction works include asphaltic concrete paving, bridges, misc. structures, and other incidental works. Prequalification data from interested contractors must be received by Director General, Roads and Bridges Public Corp., P.O. Box 756, Khartoum, by June 30. "Contractors Prequalification Data Sheets" may be obtained from the offices of Consultants at: Louis Berger International, Inc., 100 Halsted St., East Orange, N.J. 07019; or Kampsax International A/S, Dagmarhus, 12 H.C. Andersens Blvd., KD 1553 Copenhagen V, Denmark; or Berger/Kampsax, P O. Box 1671, Block 7 R B E, 71st St., Khartoum 2, Sudan.

QATAR—Private trading company seeks suppliers and contractors for immediate setup of **22 tropical climate prefab houses** in Doha. Interested U.S. firms contact immediately Abdullah Dualah, Maysaloon Trading & Contracting Co., P.O. Box 3366, Doha, Qatar, Tel: 28121. Language of correspondence either English or Arabic.

Sri Lanka Preparing Register Of Fishing Gear Manufacturers

The Manager, Supplies & Stores, Ceylon Fisheries Corp., P.O. Box 1384, Mutwal, Sri Lanka, intends to maintain a Register of Manufacturers of fishing gear and/or their accredited agents from whom the Corp. will procure its future requirements of fishing gear. Some of the items required by the Corp. from time to time are: fishing nets nylon/vinylon; mending twines nylon/vinylon; monofilament lines; fishing floats; fishing hooks; fishing ropes; tuna long line compete sets; feathered jigs; stainless steel wire; trolling spoons, and trawling gear. Manufacturers of fishing gear should apply for registration to above Corp., giving details of the manufacturer/accredited agent, location of factory, items of fishing gear that could be supplied and any other pertinent details.

UNDP GRANTS ASSISTANCE FOR 31 COUNTRY PROJECTS

The United Nations Development Program (UNDP) has recently approved 31 requests for financial and technological assistance from 15 countries. These projects are listed below with the potential opportunities for subcontracting or equipment procurement, or both, shown in parentheses.

Interested U.S. firms may obtain copies of these project summaries from the Export Information Reference Room, Office of Export Development, Room 1063, Attn: Betty W. Patrick, U.S. Department of Commerce, Washington, D.C. 20230. Please include a self-addressed label with request, and identify each project summary desired by project number, country, and title. Also available from the Export Information Reference Room is *UNDP Business Guide,* which explains how to participate in UNDP project activities.

BGD/72/006—BANGLADESH — Technical training center, Chittagong (equipment).

BGD/72/008—BANGLADESH — Hydrological survey (subcontract/equip.).

BGD/73/013—BANGLADESH — Low-lift pump training program (equipment).

BGD/73/016—BANGLADESH — Development of vocational training (equip.).

BGD / 73 / 035 — BANGLADESH — Strengthening of national meteorological services (equipment).

BGD/73/042—BANGLADESH — Development of winter crops in the northwest of Bangladesh through improved water use (equipment).

BGD/73/043—BANGLADESH — Jute industry development (subcontract/equipment).

BGD / 73 / 072 — BANGLADESH — Training of medical assistants (equipment).

BGD/74/018—BANGLADESH — Jute seed research and production (equipment).

BEN/75/012—BENIN — Skills upgrading center (equipment).

CMR/72/023—CAMEROON — University center for health sciences (equipment).

CHD/75/021—CHAD — National telecommunications school, Sarh (equipment).

ETH/75/021—ETHIOPIA — Development of veterinary field and laboratory services (equipment).

IND/71/627—INDIA — Turbomachinery and combustion laboratory, National Aeronautical Laboratory, Bangalore (equipment).

IND/72/030—INDIA — Development of Indian Institute of Packaging (equipment).

IND/74/052—INDIA — Assistance to the Central Institute of Plastics Engineering and Tools, Madras: training in plastics materials and product testing (equipment).

INS/74/002—INDONESIA — National consensus standards and quality control (equipment).

INS/74/018—INDONESIA — Textile industry development program (equipment).

INS/75/003—INDONESIA — Cooperative training and development (equipment).

KEN/75/005 — KENYA — Marketing development program (equipment).

MLW/75/019 — MALAWI — Fishery expansion project (subcontracts/equipment).

NEP/75/009—NEPAL—Gandaki River Basin power study (masterplan) (subcontract/equipment).

SRL/75/058—SRI LANKA — Reorganization of national research, extension and training resources for agriculture (equipment).

SRL/75/074—SRI LANKA — Rubber Research Institute (equipment).

SRL/75/075—SRI LANKA — Tea Research Institute (equipment).

SRL/75/076—SRI LANKA — Coconut Research Institute (equipment).

SUD/74/044—SUDAN — Agricultural development in Jebel Marra area (subcontract/equipment).

SUD/76/016—SUDAN—Supply of fuel to southern region (equipment).

SYR/72/004—SYRIA — Integrated Agricultural development (equipment).

THA/75/021—THAILAND — Acceleration of rubber replanting (subcontract/equipment).

TUR/75/016 — TURKEY — Development of sericulture (equipment).

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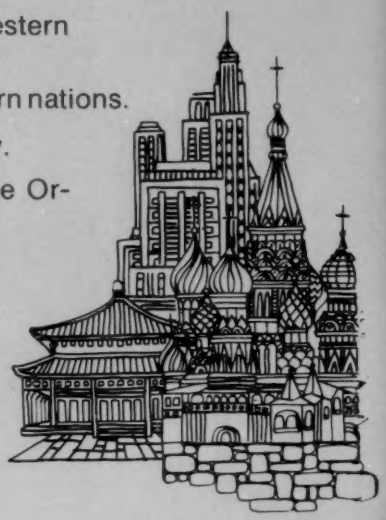

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